

LANDING HIGH JAPAN

TAITO LANDING SERIES



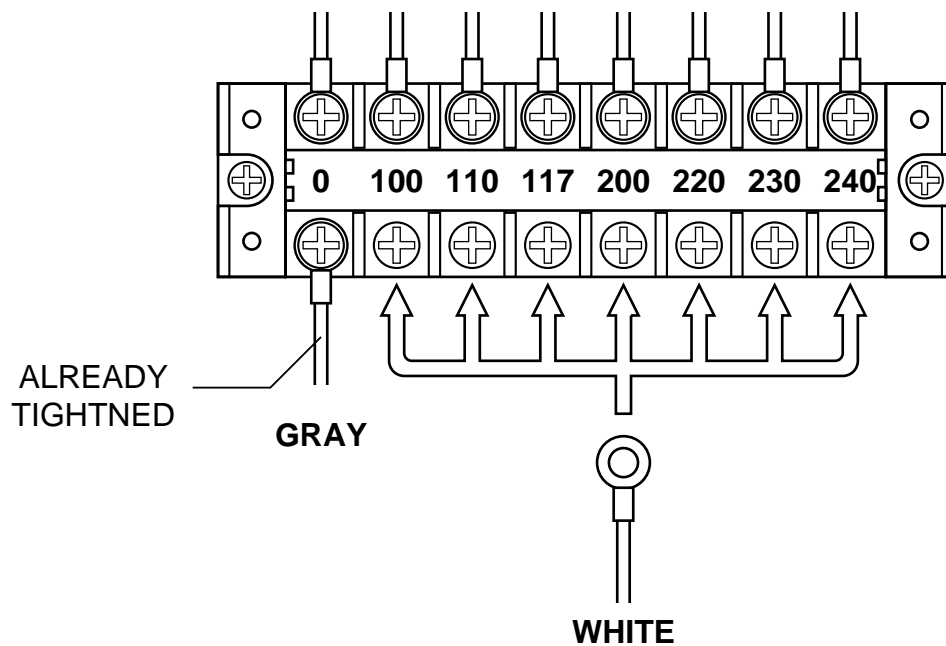
LANDING HIGH JAPAN

Instruction Manual

⚠ CAUTION

- To use this machine safely and correctly, read this manual carefully and make sure you fully understand the contents before using the machine.
- After reading this manual, keep it in a designated place so that it can be referenced by others anytime.

Confirm that white cords are properly to match with locally supplied commercial power source voltage(100 trough 240V).
If connection is not appropriate, reconnect to match supply power voltage.



[INSIDE OF BACK DOOR]

Preface

Thank you for purchasing our arcade use equipment "LANDING HIGH JAPAN" game machine.

Purpose of this instruction manual:

This manual includes handling methods and cautions for using the "LANDING HIGH JAPAN" machine correctly. Read it carefully and keep it in a safe place so that it can be referenced by others anytime. If you should lose this manual, contact our dealers to obtain a new one.

Place to be contacted:

To request repairs and parts, contact the dealer you purchased your machine from.

Contents of this instruction manual:

The contents of this manual are as follows:

- Introduction: Safety information for this machine
- Chapter 1 - 2: Transportation and installation
- Chapter 3 - 6: Operation checks, settings, adjustments, and game details
- Chapter 7 - 9: Maintenance
- Appendix: Parts lists and wiring diagrams

Important information for safety

This manual use the following definitions to explain the safety information. Read them carefully and be sure to follow all cautions and warnings.

Definition of personnel in this manual:

We use the following definitions for game-machine personnel in this manual:

Management staff

Staff who operate and maintain amusement sites or shops under the supervision of the owners of amusement game machines.

Arcade maintenance man

Persons who have experiences in arcade-game machine maintenance and regularly carry out the installation, assembly and maintenance checks of games, and who replace parts and consumable items under supervision of the game owners or the shop management staff.

Engineer

Persons who work for amusement game machine manufacturers and are responsible for the design, product inspection, and maintenance of amusement game machines, or those who have knowledge of electrical, electronic, and mechanical engineering that is equivalent to the knowledge of an engineering high school graduate, and who regularly maintain and repair amusement game machines.

Player

Persons who play games at facilities and shops where arcade amusement game machines are installed.

Gallery

Persons who look at games at facilities and shops where arcade amusement game machines are installed.

Explanation of the safety symbols:

In this manual, degrees of danger and damage caused by mishandling are classified by use of the following labels and symbols.



Indicates a situation that may lead to death or serious injury if not handled properly.



Indicates a situation that may lead to personal injury, or damage to the parts or the machine if not handled properly.



Indicates important parts of the procedures that should be followed carefully.



Indicates prohibitions ("Don'ts").

Cautions for safety

Transportation

CAUTION

- Make sure to raise the adjustable feet as high as they will go before transporting the game machine on a forklift.
- Make sure to insert forks from the left side of the main housing, looking at it from the front.
- Be careful not to hit the casters of adjustable feet on the game machine when inserting the forks.
- Before moving the machine, disconnect the power cable from the machine.
- Before moving the machine across the floor on its casters, make sure all of the height adjusters are as high as they will go.
- Make sure to lower the height adjusters and secure the game machine to the truck bed when transporting it.
- When transporting this game machine to another location, make sure all of the accessories and this instruction manual are shipped with it.

Installation (1)

CAUTION

- Never install the game machine in a location where it creates a fire hazard. Never install it in front of fire extinguishers.
- Make sure to allow the specified space around the machine when installing it. Failure to provide enough space may cause an accident.
- Before moving the machine, disconnect the power cable from the machine.
- Before moving the machine across the floor on its casters, make sure all of the height adjusters are as high as they will go.
- Make sure to separate the machine into three units before lifting and moving it.
- Be careful not to injure yourself on the edges of the metal plates when working with the game machine.
- Before removing the video cabinet assembly, make sure to lower all height adjusters and secure the machine.

Installation (2)

WARNING

- Never touch the back of the monitor or the monitor circuit, or you may get an electric shock.

CAUTION

- Do not try to lift the video cabinet assembly by holding the title panel. If the title panel receives excessive stress, it may be damaged.
- Make sure to secure the machine using the adjustable feet.
- Do not lay the power cord across any aisle or passageway since a player or passerby may stumble on it.

Operation check

CAUTION

- The machine's operation must be checked after it is moved or installed.
- Be careful not to injure yourself on the edges of the metal plates when working with the game machine.

Adjustment

CAUTION

- Do not adjust the output voltage of the switching regulator higher than specified. Setting output voltage higher may break the ICs on the PC board.

Maintenance

CAUTION

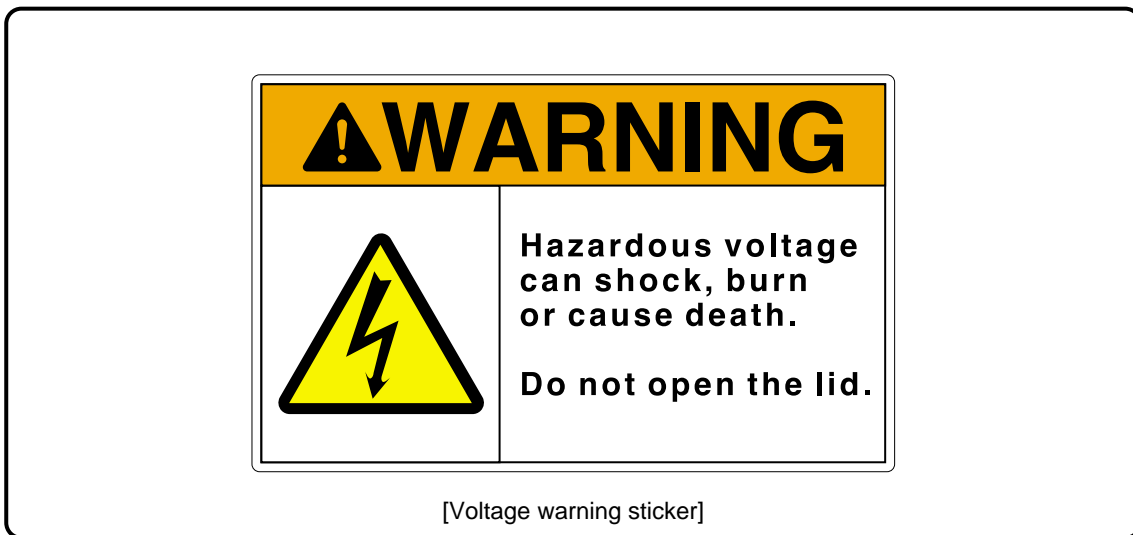
- Only qualified arcade maintenance men or engineers should perform maintenance described in this manual. Do not attempt to make any repairs or perform any maintenance not described in this manual.
- If any damages or breakage is found, turn OFF the power supply and contact the dealer. Operating the game machine with damage or known problems may result in even more damage or personal injury.
- Use of parts other than genuine TAITO parts in the maintenance of the machine will be regarded as unauthorized modification. Never modify the machine as it may cause malfunction of the machine.
- Make sure to turn OFF the power switch on the housing before replacing any part.
- Make sure to turn OFF the power switch before replacing a fluorescent lamp, and leave it OFF for 3 minutes, so that it cools down. Touching a lamp before it has cooled may cause burns.
- Before removing the smoke panel, make sure to lower all of the adjustable feet and secure the machine.
- Before removing the title panel, make sure to lower all of the adjustable feet and secure the machine.
- Be careful when removing the title panel because you have to work at height.
- Be careful when handling the hard disk since it is easily damaged.
- Be careful not to catch or slice yourself on the edges of the metal plates edges when working with the game machine.

Important security parts

This manual refers to the parts installed for security of the product as “important security parts.” Check the important security parts before and after operation each day.

A sticker shown in the figure is attached to the important security parts.

Voltage warning sticker



Fire cautions

The “LANDING HIGH JAPAN” machine is not equipped with a smoke or heat detector. Make sure that players do not place cigarettes on the game machine body.

Unauthorized modifications

Use of parts other than genuine TAITO parts in the maintenance of the machine is regarded as unauthorized modification.

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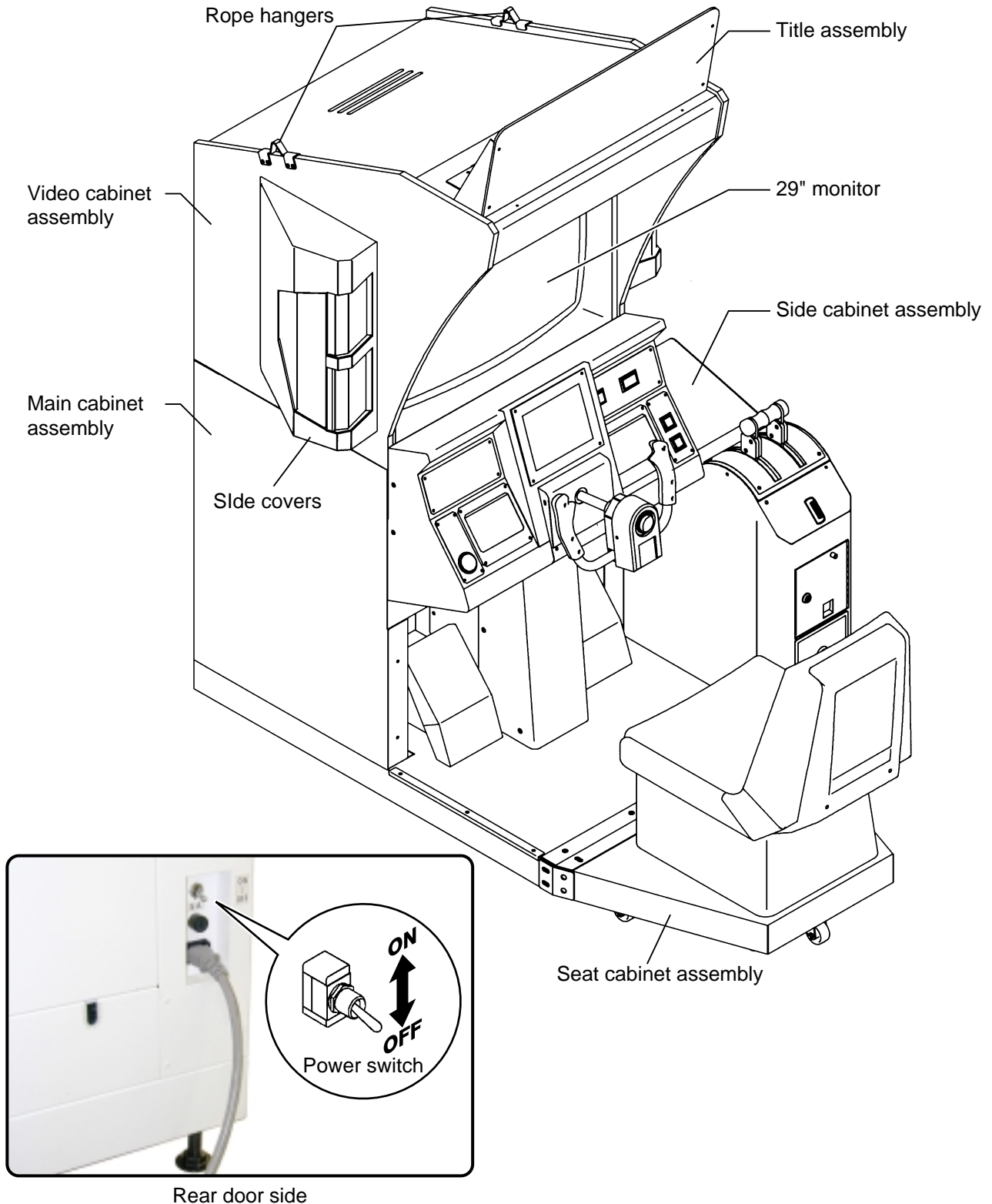
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Product overview

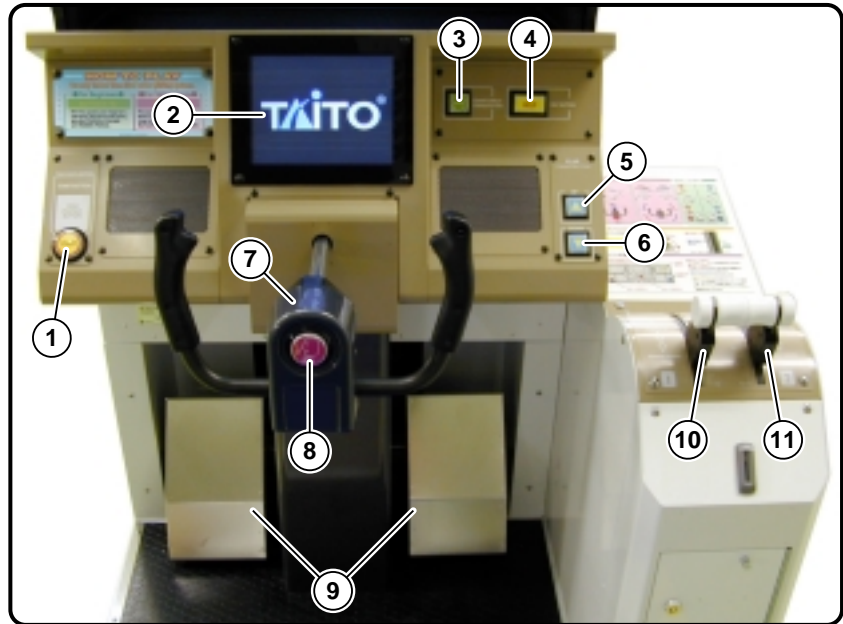
Name of each part

Overview

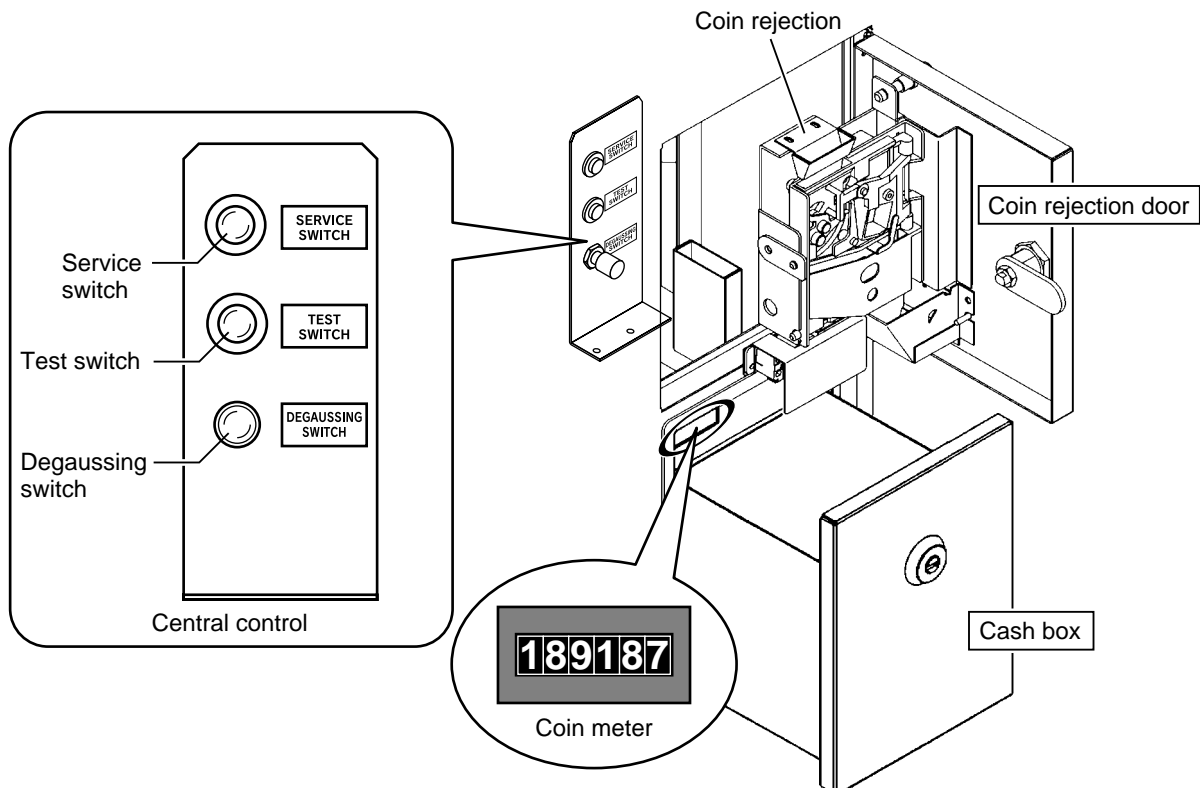


Names of each part in the operation section

- Start & view change button
- Cockpit display
- Cockpit display change button
- Help button
- Flap UP button
- Flap DOWN button
- Control column
- Speak button
- Rudder pedal
- Left thrust lever
- Right thrust lever



Inside the coin rejection door

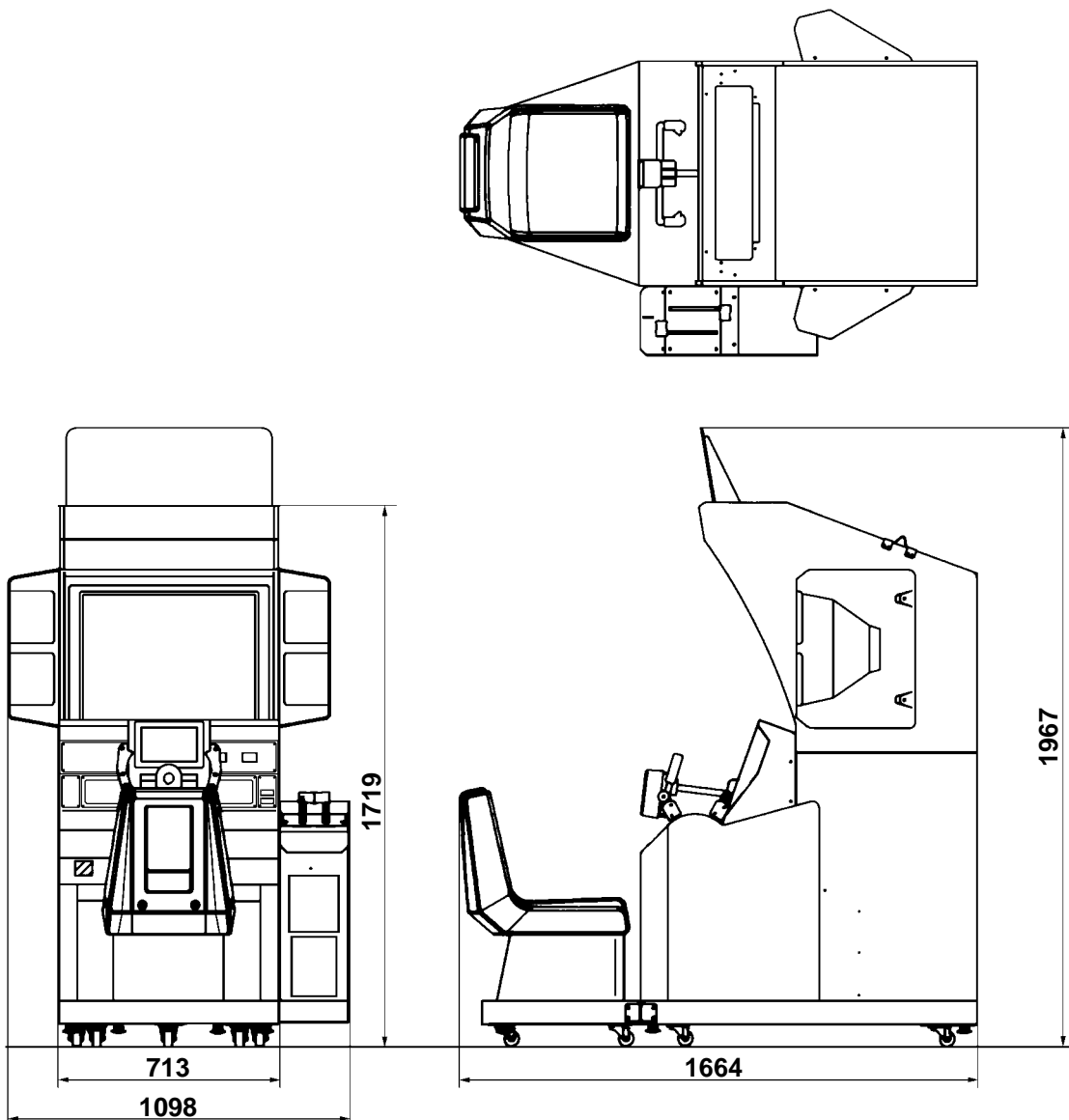


Product specifications

“LANDING HIGH JAPAN” is an amusement game machine for arcade use and it conforms to the regulations for electronic devices.

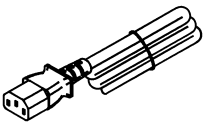
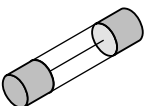
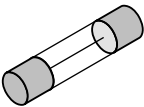
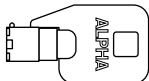
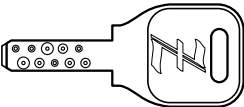
| Items | Specifications |
|--------------------------|--------------------------------|
| External dimensions (mm) | 1098 (W) x 1967 (H) x 1664 (D) |
| Total weight | Approx. 230 Kg |
| Number of players | 1 |

External dimensions



Accessory list

Make sure that all accessories have been included in the package before installing the machine. If you find any missing parts, contact your dealer.

| Name [part No.] | Place packed | Q'ty |
|---|--|----------|
| AC CORD AC 250 V 10 A [C0700334A]  | In the cash box | 1 |
| FUSE 5 A 250 V [C1600049A]  | In the cash box | 1 |
| FUSE 6 A 125V [C1600038A]  | In the cash box | 1 |
| SERVICE KEY (LY-1153) [E5000586A]  | In the key bag | |
| CASH KEY  | In the key bag | |
| SERVICE INSTRUCTION [G2501007A] | Stored in a plastic bag and stuck on the machine housing | 1 |

Service key

The service key (LY-1153) is used to open the coin rejection door.

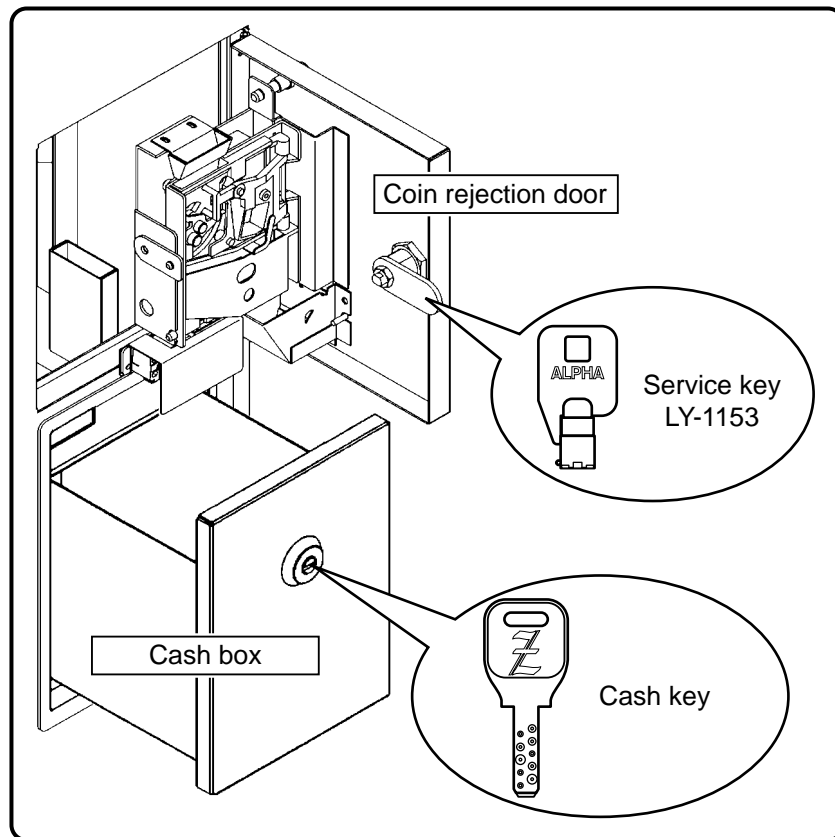
Inside the coin rejection door, there are important operating components that control the “LANDING HIGH JAPAN” operation. Make sure to keep the door locked unless you are performing maintenance inside. Keep the key in a safe place. If you lose the service key, contact your dealer.

Cash key

The cash key is used to open the cash box.

Make sure to lock the door, and keep the key in a safe place.

If you lose the service key, contact your dealer.



Handling the packing material

When shipped, the main housing of the “LANDING HIGH JAPAN” game machine is protected by packing material. In order to dispose of these packing materials (such as plastic bags, cardboard, styrene foam), follow the instructions of your local authorities.

Chapter 1 Transportation

1-1. Loading and unloading the game machine using a forklift

⚠ CAUTION

Make sure to raise the adjustable feet as high as they will go before transporting the game machine on a forklift.

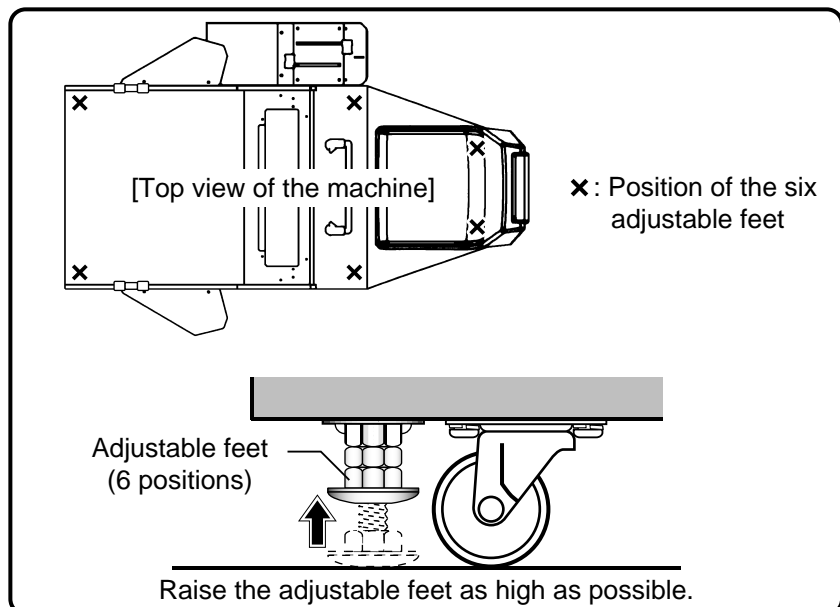
⚠ CAUTION

Make sure to insert forks into the fork insert slots.

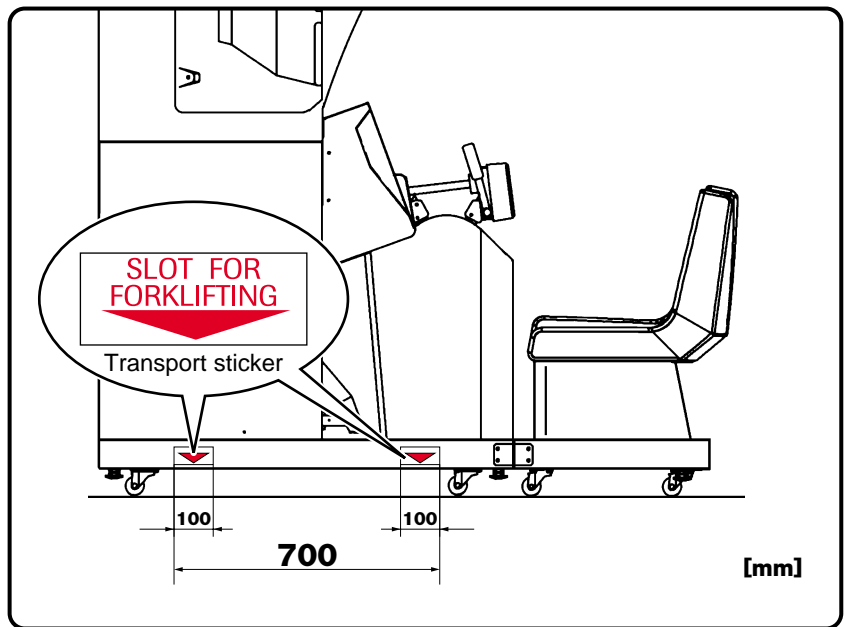
⚠ CAUTION

Be careful not to hit the casters or the adjustable feet on the game machine when inserting the forks.

- 1 Before moving the machine, raise the six adjustable feet as high as possible using a monkey wrench or the like.



- 2 Adjust the distance between the two forks on the forklift to match the transport stickers on the bottom of the machine left side. Leave 700 mm between the stickers.



- 3 Adjust the distance between the two forks so that they will not go over the stickers. Then insert the forks slowly into the slots and lift the machine.

1-2. How to load the machine on a truck

⚠ CAUTION

Before moving the machine, disconnect the power cable from the machine.

⚠ CAUTION

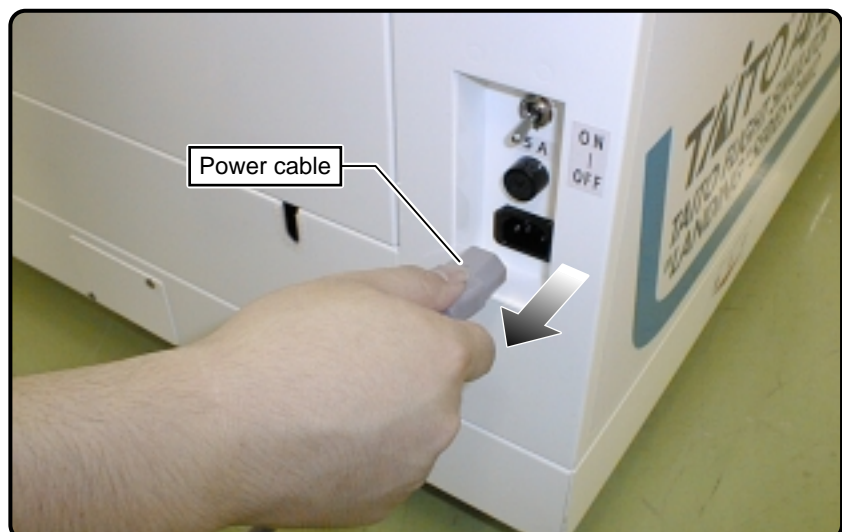
Before moving the machine across the floor on its casters, make sure that all of the adjustable feet are as high as they will go.

⚠ CAUTION

Make sure to lower the adjustable feet and secure the game machine on the floor of the truck when transporting it.

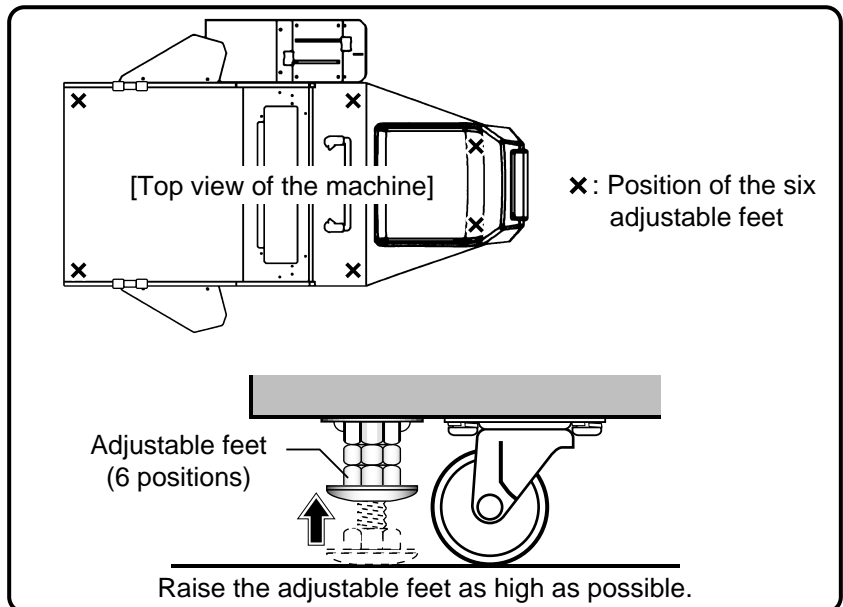
Before moving the machine, make sure that the power cable is disconnected.

- 1 Disconnect the power cable from the machine.



- 2 Store the removed power cable inside the cash box. Make sure that all the locks are locked. (Location of the keys: Page 16)

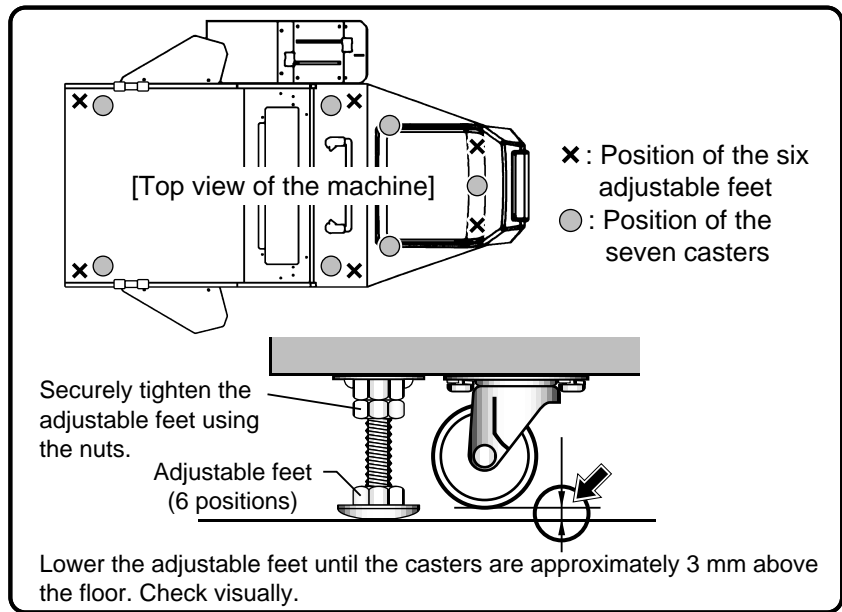
- 3** Before moving the machine, raise the six adjustable feet as high as possible using a monkey wrench or the like.



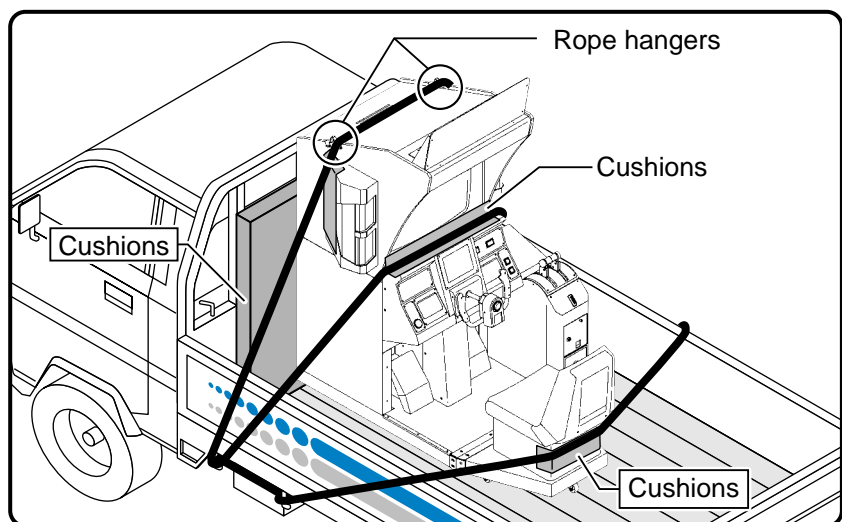
- 4** Move the machine next to the truck that will be used to transport the game machine. When moving the machine, push or pull it gently longitudinally with your hands while walking slowly, as shown in the figure below.



- 5** Load the machine on a truck and secure it by lowering the six adjustable feet. Lower the adjustable feet until the casters are raised approximately 3 mm above the truck using a monkey wrench or the like.



- 6** Secure the machine using ropes. Put cushioning materials between the ropes and the machine to avoid direct contact.



Important !

- If the machine is transported without putting ropes on the places specified in the figure, or without cushioning materials, it may be damaged.

1-3. Re-transportation

⚠ CAUTION

Before moving the machine, disconnect the power cable from the machine.

⚠ CAUTION

When transporting the "LANDING HIGH JAPAN" to another location, make sure that all of the accessories and this instruction manual are shipped with it.

⚠ CAUTION

Before moving the machine across the floor on its casters, make sure that all of the adjustable feet are as high as they will go.

- 1** Turn OFF the power switch.
- 2** Remove the power plug from the outlet. Then, disconnect the power cable from the machine and store it inside the cash box.
- 3** Store all of the accessories in their original places. Put the instruction manual into a plastic bag and stick the bag on the seat using adhesive tape.
(Accessory list: Page 15)
- 4** Make sure that all the locks are locked.
(Location of the keys: Page 16)
- 5** Before moving the machine, raise the six adjustable feet as high as possible using a monkey wrench or the like.
- 6** See section 1-2 "How to load the machine on a truck," on page 19, if you need to transport the game machine using a truck.

Chapter 2 Installation

2-1. Installation requirements

Installation requirements

The following installation requirements must be observed.

| | |
|-----------------------|----------------------------|
| Installation location | Indoor use only |
| Ambient temperature | 0 to 40 °C |
| Humidity | 10 to 70 % (no condensing) |

CAUTION

Never install the game machine in a location where it might present a hazard in a fire. Do not install it in front of fire extinguishers.

CAUTION

Make sure to provide the specified space around the machine when installing it. Failure to provide enough space may cause an accident.

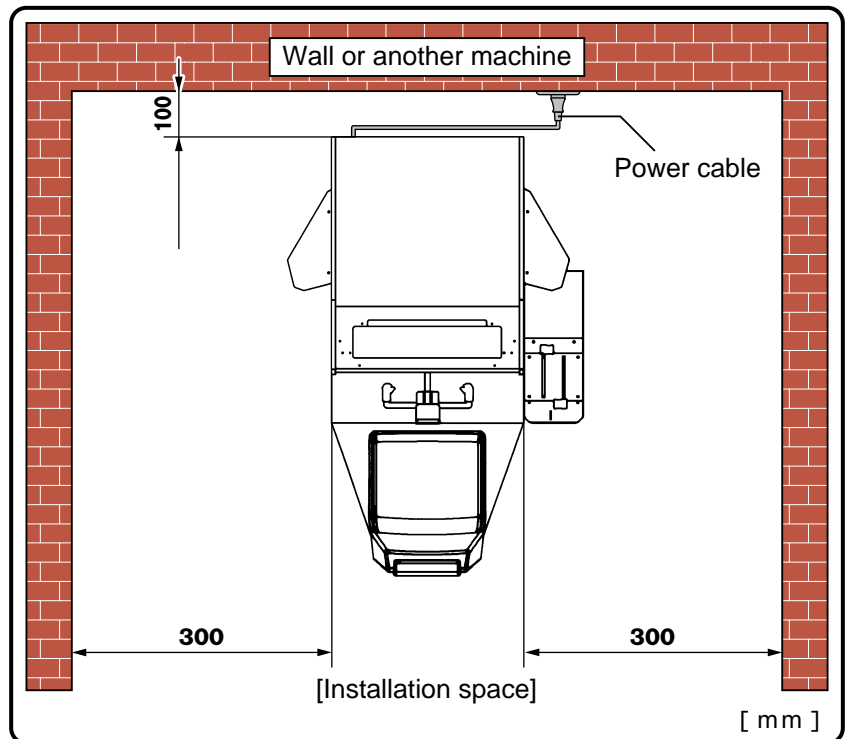
Installation environment

Never install the game machine outdoors. Also avoid the following locations even though they are indoors.

- Near a leaky roof, close to any kind of dripping water, or any place with high humidity that can condense
- Close to an indoor pool or showers
- Exposed to direct sunlight
- Exposed to direct heat, such as close to a heater vent, or in a highly heated room
- Close to flammable or volatile chemicals, or dangerous materials
- Avoid floors that slope (any slope more than 2 degrees)
- Avoid strong vibrations
- Avoid dusty locations
- Avoid any location that does not allow enough space around the machine (See page 24 for installation space requirements.)

Installation space requirements

A space of 300 mm or more is required between the sides of the seats and the wall or another machine. This space should not be shared with passages for people. Make sure to leave a 100 mm space between the back of the machine and the wall or another machine to avoid catching or damaging the power cable.

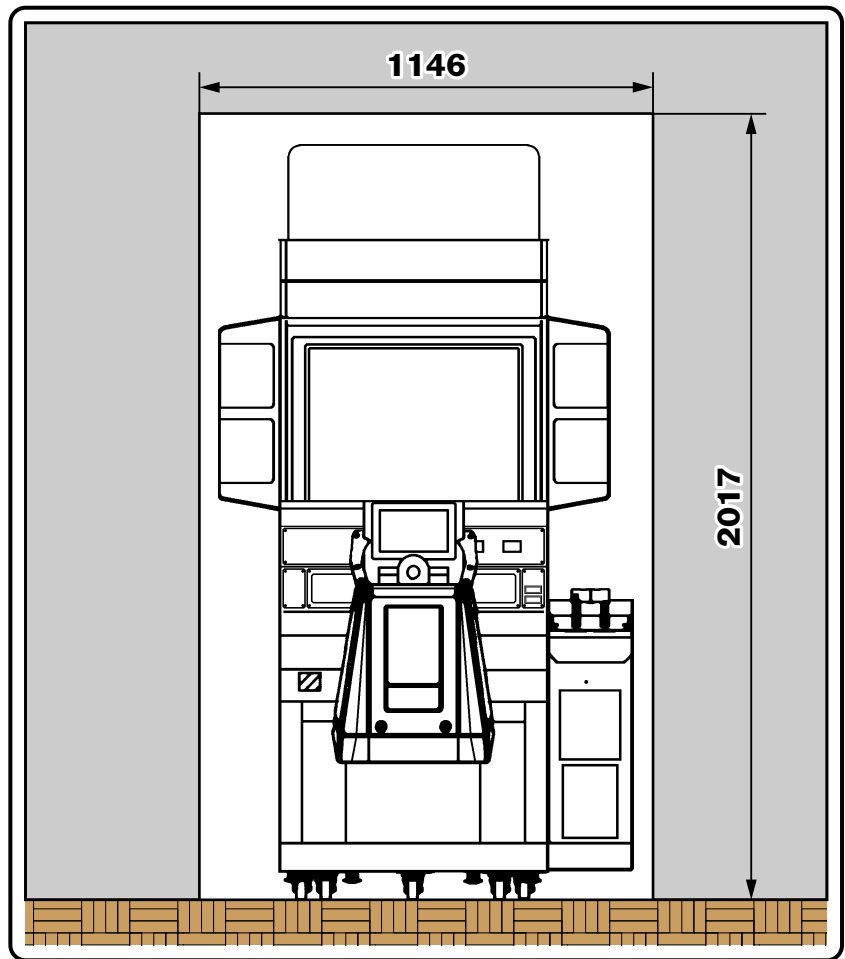


2-2. Delivery

Delivery of the "LANDING HIGH JAPAN" game machine to an amusement facility or a shop. Make sure that the entrance is at least as big as the following dimensions.

2-3. Entrance size

The entrance for the game machine must be at least 1,146 mm (W) x 2,017 mm (H).



2-4. How to move the game machine by hand

⚠ CAUTION

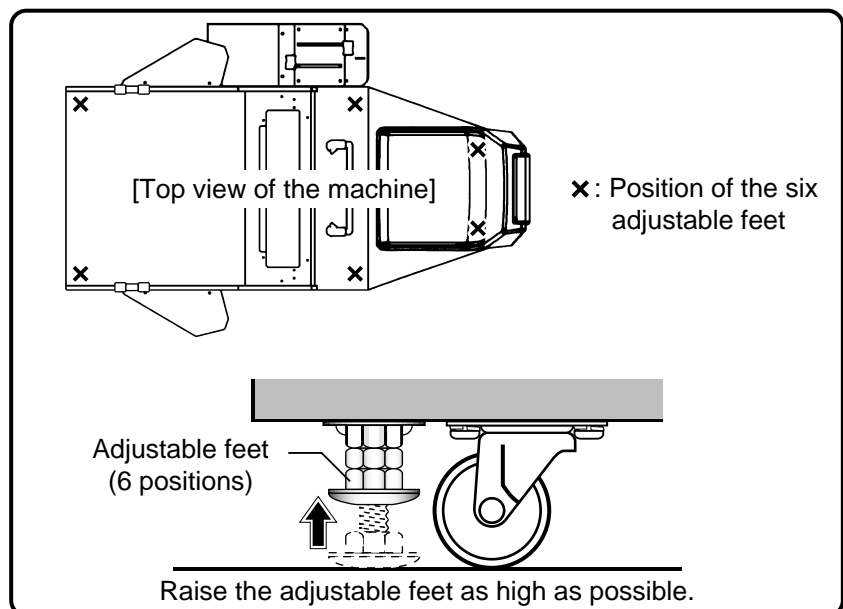
Before moving the machine, disconnect the power cable from the machine.

⚠ CAUTION

Before moving the machine across the floor on its casters, make sure that all of the adjustable feet are as high as they will go.

How to move the machine

- 1** Before moving the machine, make sure that the power cable is disconnected.
- 2** Before moving the machine, raise the six adjustable feet as high as possible using a monkey wrench or the like.

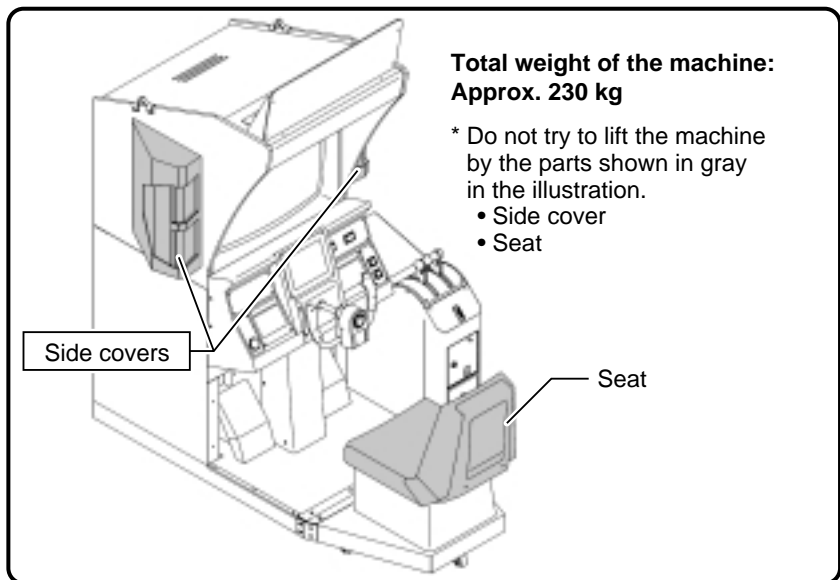


- 3** When moving the machine, push or pull it gently longitudinally with your hands while walking slowly, as shown in the figure below.



When you cannot move the machine on its casters

If you cannot move the machine on its casters because of problems such as steps in the path inside the shop, you must lift the machine to move it. The machine weighs approximately 230 kg. Do not try to lift cabinet by the seat, or side covers, since they may be damaged.



Important !

- Do not try to lift the machine by holding the seat, or side cover, since they may be damaged.

Make sure to separate the machine into three units.
(Refer to the section, "How to lift and move the machine")

How to lift and move the machine

Make sure to separate the machine into three units before lifting and moving it.

The dimensions and weight of each of the three units are shown in the table on the next page. For how to disassemble the machine, see the respective pages.

⚠ CAUTION

Make sure to separate the machine into three units before lifting and moving it.

⚠ CAUTION

Be careful not to injure yourself on the edges of the metal plates when working with the game machine.

⚠ CAUTION

Before removing the video cabinet assembly, make sure to lower all height adjusters and secure the machine.

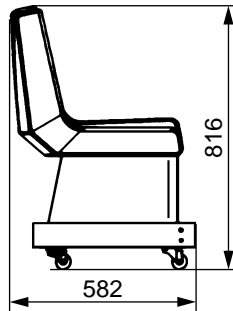
⚠ WARNING

Never touch the back of the monitor or the monitor circuit, or you may get an electric shock.

⚠ CAUTION

Do not try to lift the video cabinet assembly by holding the title panel. If the title panel receives excessive stress, it may be damaged.

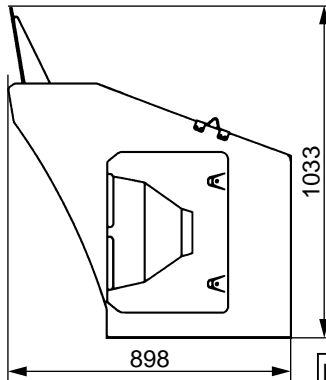
Seat cabinet assembly



Refer to the procedure on page 30, to removing the seat cabinet assembly.

| | |
|-----------------|-----------------------------|
| Dimensions (mm) | 582 (W) x 816 (H) x 713 (D) |
| Weight (kg) | Approx. 22 Kg |

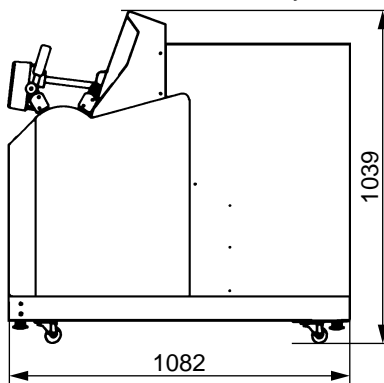
Video cabinet assembly



Refer to the procedure on pages 31 to 34, to removing the video cabinet assembly.

| | |
|-----------------|-------------------------------|
| Dimensions (mm) | 898 (W) x 1033 (H) x 1042 (D) |
| Weight (kg) | Approx. 70 Kg |

Main cabinet assembly

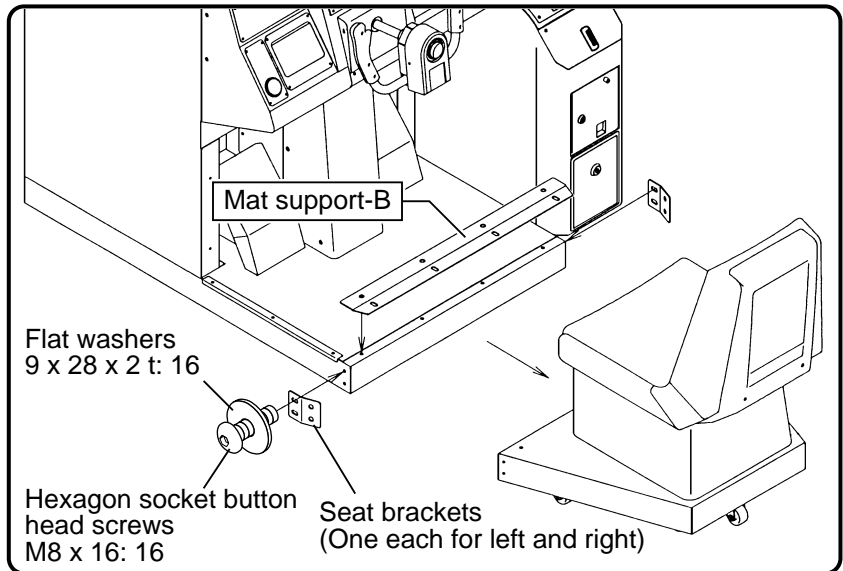


This is the main cabinet assembly after the seat cabinet and video cabinet assemblies have been removed.

| | |
|-----------------|-------------------------------|
| Dimensions (mm) | 1082 (W) x 1039 (H) x 933 (D) |
| Weight (kg) | Approx. 138 Kg |

Removing the seat cabinet assembly

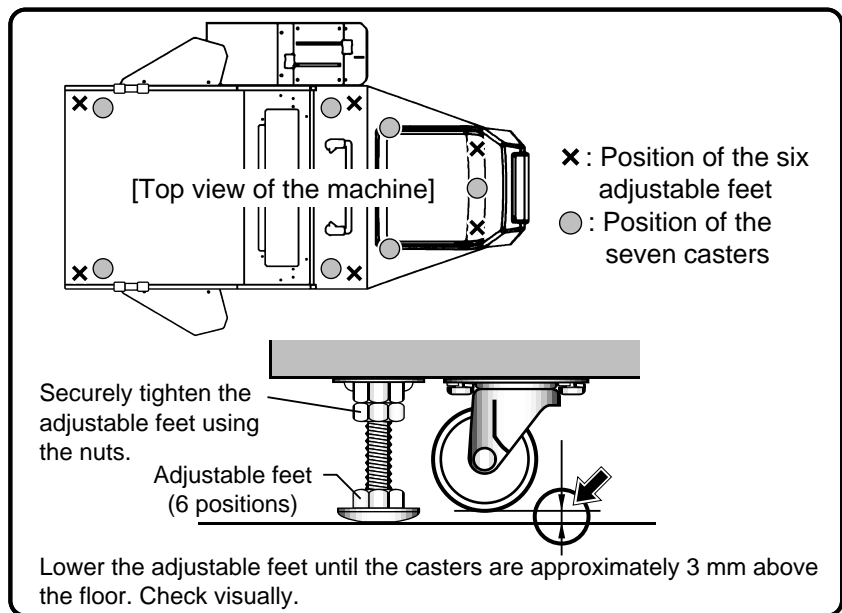
- 1** Loosen the 16 screws and remove the seat brackets and mat support-B. Be careful not to injure yourself on the edges of the metal plates when working with the game machine.



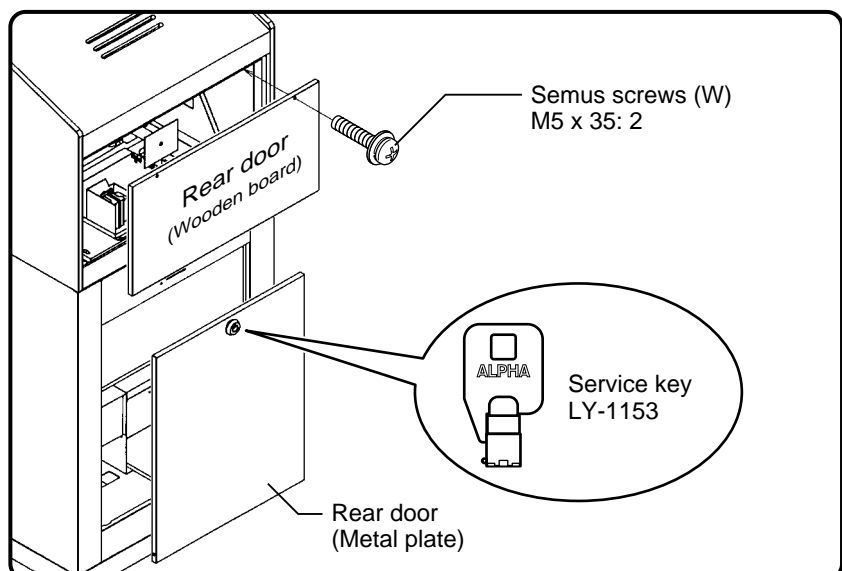
- 2** Now you can move the seat cabinet assembly and the main cabinet assembly separately. To assemble the machine after it is delivered, simply reverse the procedures above.

Removing the video cabinet assembly

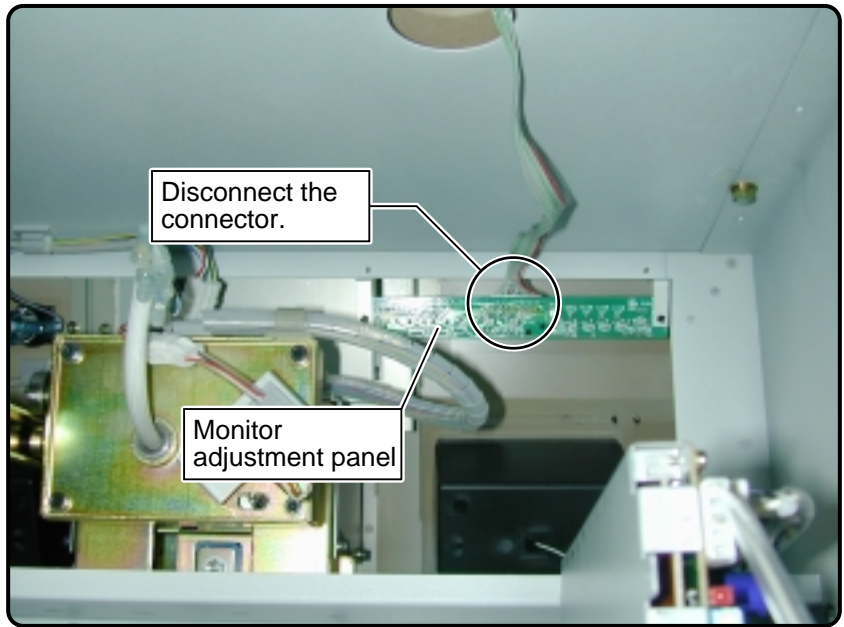
- 1** Before removing the video cabinet assembly, make sure to lower all the height adjusters and secure the machine. Lower the adjustable feet using a monkey wrench or the like so that the casters are raised approximately 3 mm above the floor.



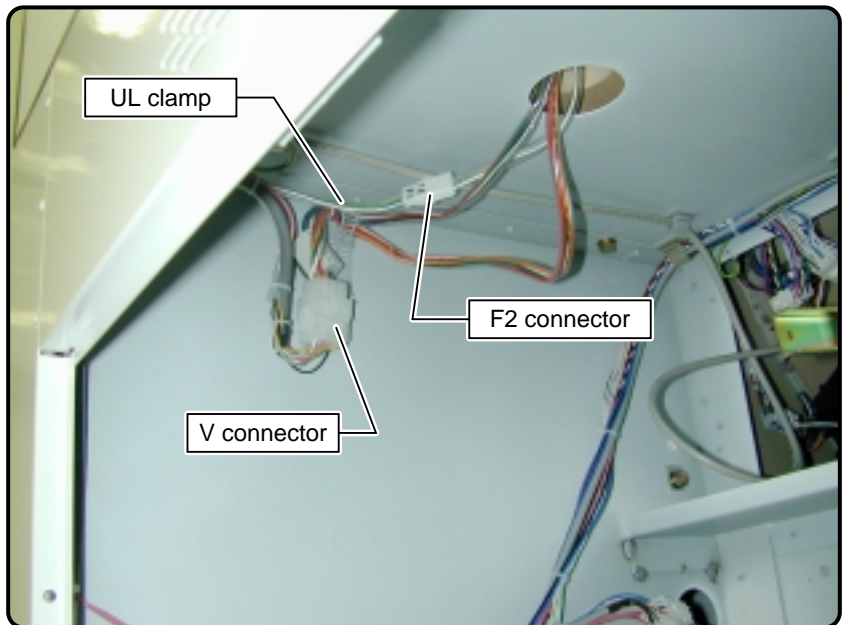
- 2** Loosen the two screws on the rear door of the video cabinet assembly, that is on the top panel of the rear of the machine, and remove the door. Then remove the rear door of the main cabinet assembly, that is the bottom panel of the machine, using the service key.



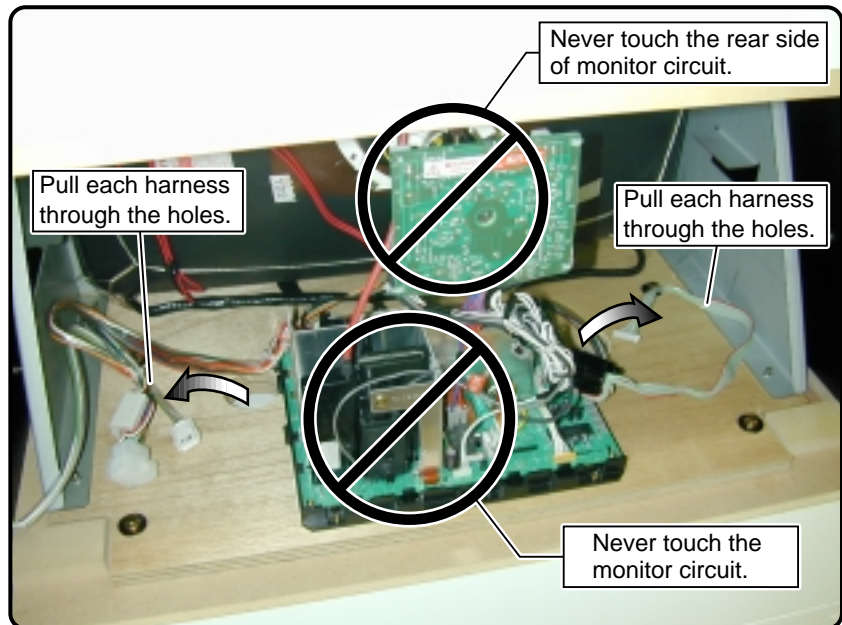
- 3** Remove the connector that is connected to the monitor adjustment panel on the upper right and deep inside of the main cabinet assembly (1 piece).



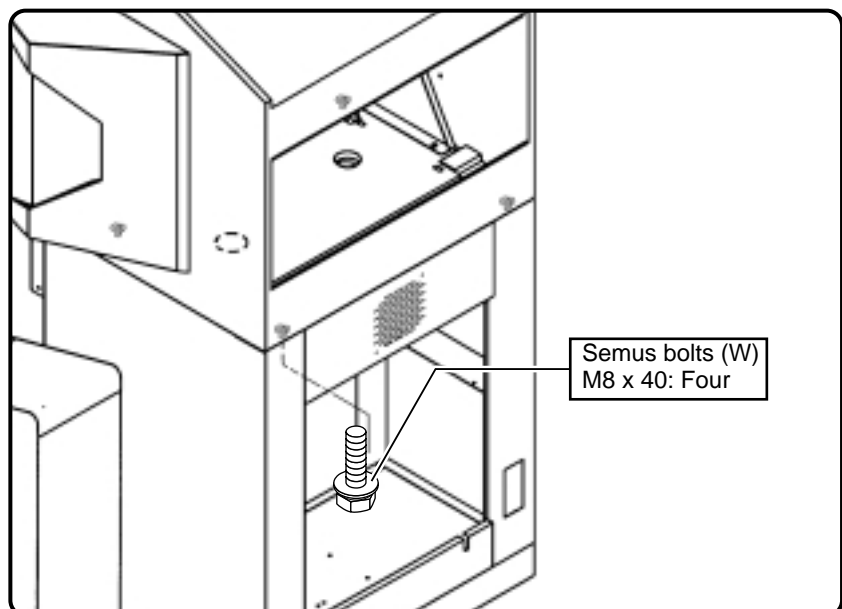
- 5** Disconnect the V, F2 connectors, and UL clamp as shown in the figure below.



- 6** Pull the harnesses, which were removed in the previous item, through the left and right holes shown in the figure to the inside of the video cabinet assembly. Never touch the monitor circuit and the rear side of the monitor, or you may receive an electric shock.

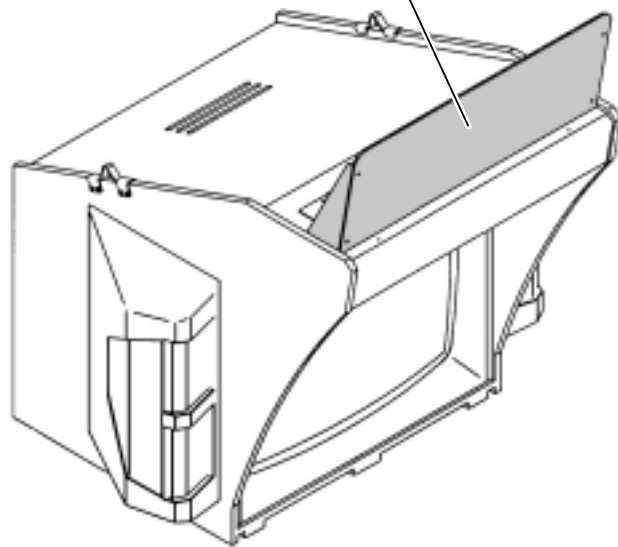


- 7** Remove the four bolts that are used to secure the video cabinet assembly, from inside the main cabinet assembly. Now you can remove the video cabinet assembly.



- 7 Remove the video cabinet assembly. It weights approximately 70 kg. To lift the video cabinet assembly, hold the bottom of the assembly, and move it slowly. Never hold the title assembly. If the title assembly receives excessive stress, it may be damaged. To assemble the machine, reverse the procedures.

Do not hold the title assembly.



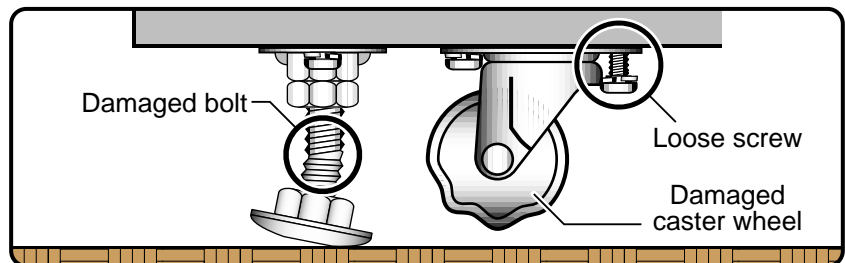
Weight of the video cabinet assembly: Approx. 70 kg

2-5. Check points after delivery

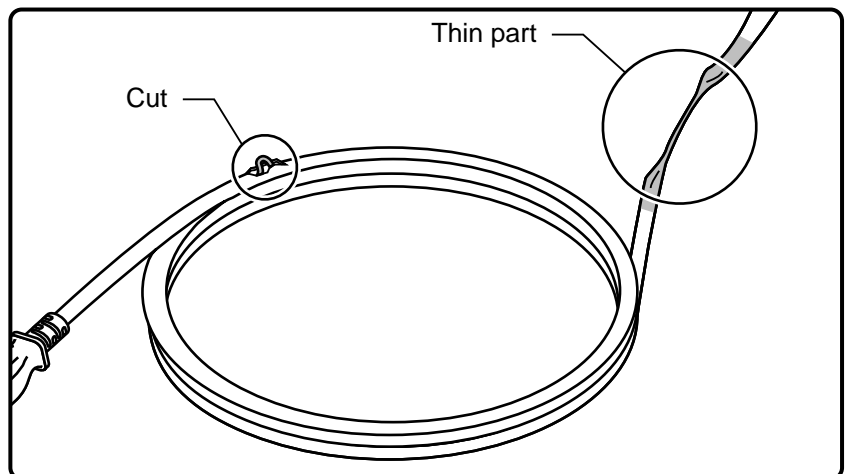
This product is checked thoroughly before being shipped. However, a problem may occur during transportation. Therefore, please check the following items before installation.

Make sure that there are no dents or scratches on the machine.

Make sure that the casters and adjustable feet are not damaged or loose.



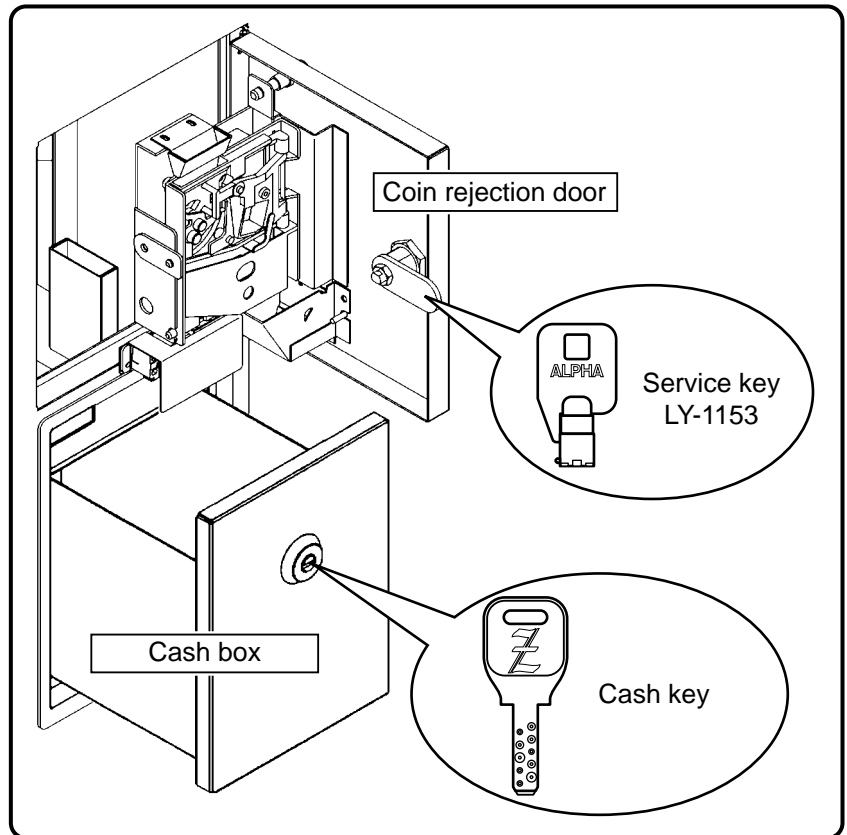
Make sure that there are no cuts or thin areas in the power cord.



Make sure that all of the accessories are included.

(Accessory list: Page 15)

Make sure that all of the locks work properly with the supplied keys.



In case of a problem

If you find a problem with any of the items above, please contact your dealer.

2-6. Securing the machine

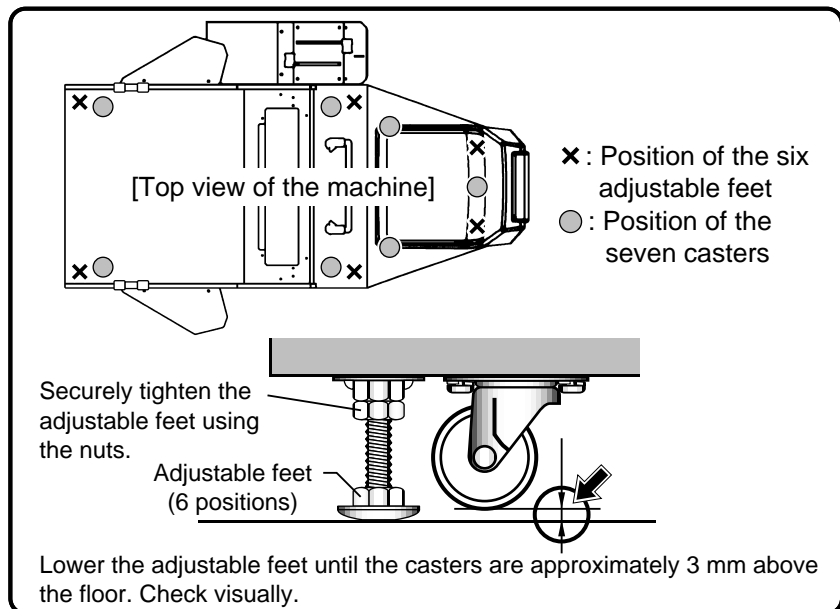
⚠ CAUTION

Never install the game machine in a location where it might present a hazard in a fire. Do not install it in front of fire extinguishers.

⚠ CAUTION

Make sure to secure the machine using the adjustable feet.

- 1** Move the machine to the installation site.
(Delivery: Page 25)
- 2** Secure the machine using the six adjustable feet. Lower the six adjustable feet under the machine using a monkey wrench or the like so that the casters are raised approximately 3 mm above the floor.

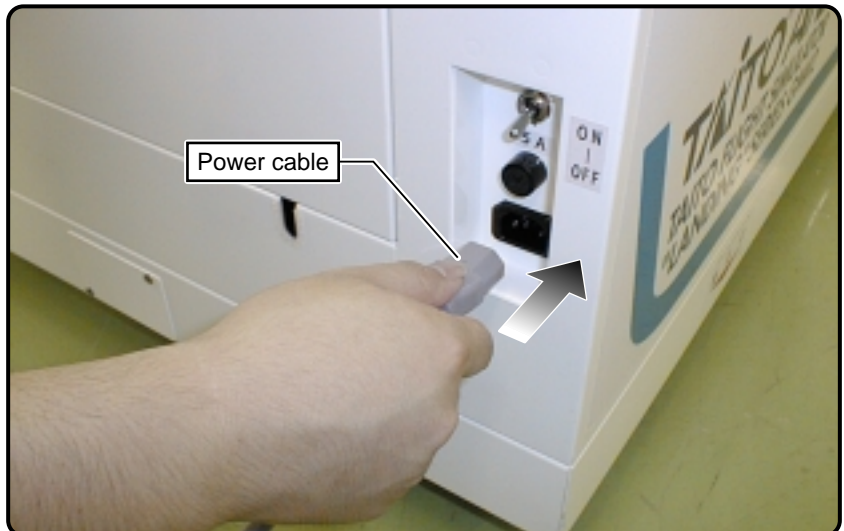


2-7. Connecting a power supply

⚠ CAUTION

Do not lay the power cable across any aisle or passageway since a player or passerby may trip on it.

- 1** Turn OFF the power switch.
- 2** Open the cash box using the cash key, and take the supplied power cable out of the cash box.
- 3** Connect the power cable to the machine.



- 4** Connect the power plug to an outlet.

Chapter 3 Operation check

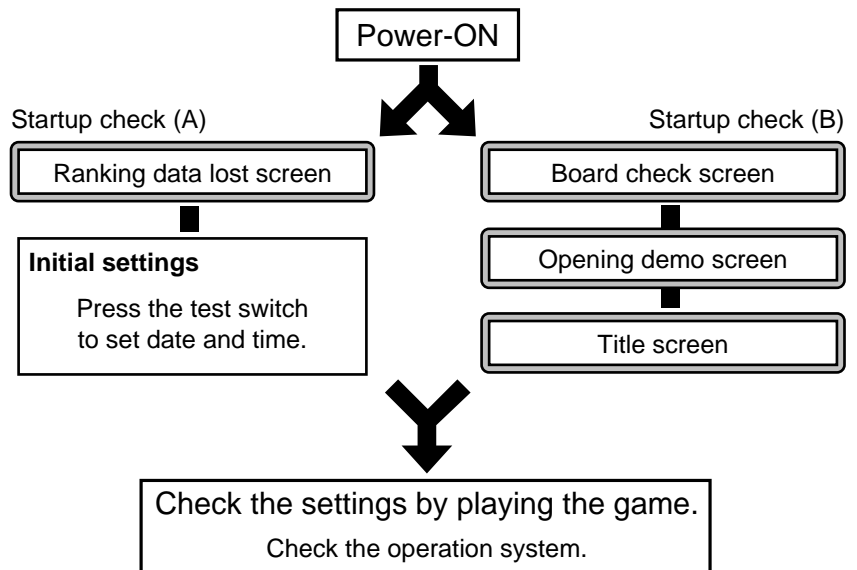
3-1. Operation check

⚠ CAUTION

Be sure to check the operation after transporting and installing the machine.

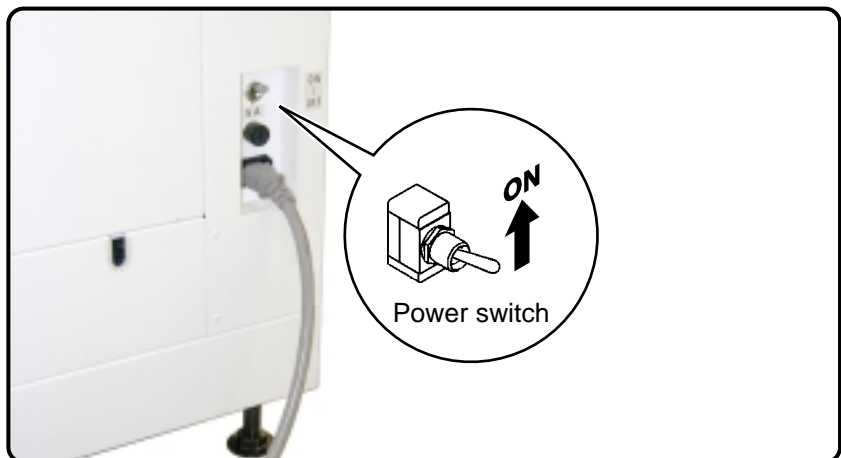
Be sure to check the machine's operation after transporting and installing the machine.

Operation check procedure



3-2. Startup check

- 1 Turn the power switch ON.



Opening demo screen

After the screen displays the TAITO logo, it displays the demonstration that includes the introduction of the airplane.



Title screen

After the title screen appears, the demonstration screen will be displayed. Once the startup check is complete, go to section "3-4: Check the settings by playing the game." (Check the settings by playing the game: Page 44)



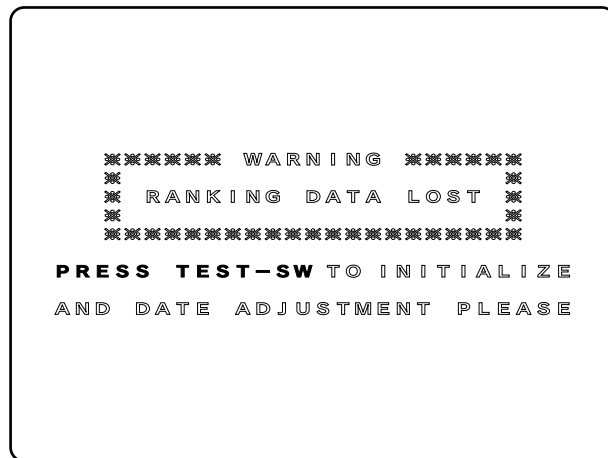
3-3. Initial settings

If the "RANKING DATA LOST" screen appears after turning the power ON, press the test switch and set the date and time.

The initial settings should only be changed by shop maintenance personnel or engineers.

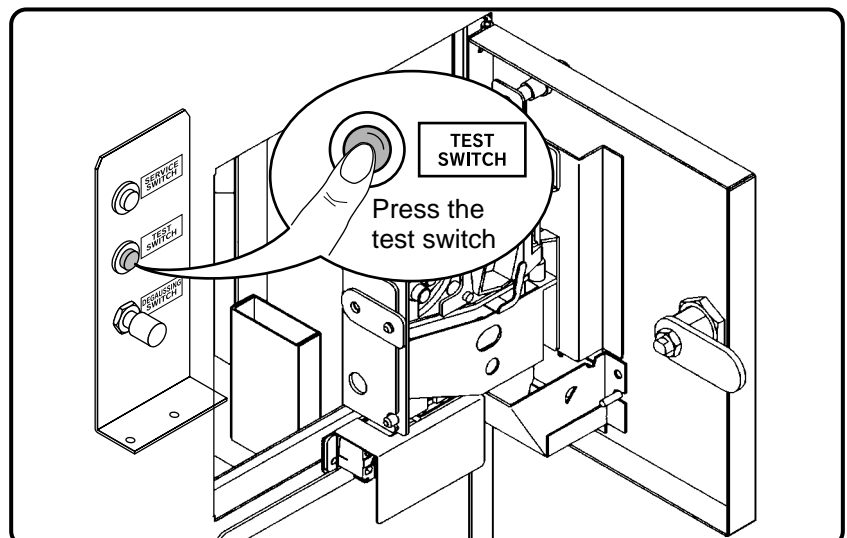
Important!

- The initial settings should only be changed by shop maintenance personnel or engineers.



1 Open the coin rejection door using the supplied service key.

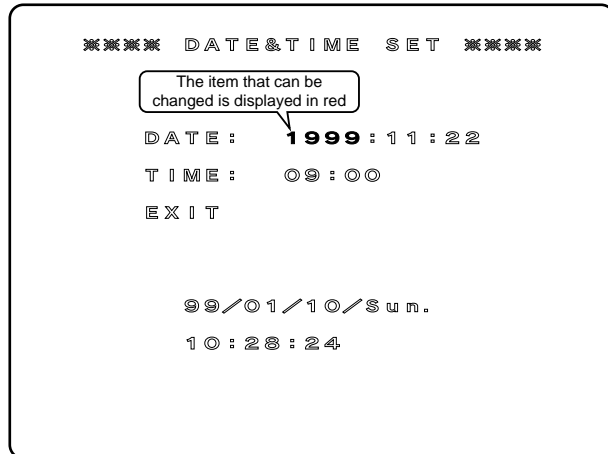
2 Press the test switch.
(It will take a few seconds to clear the data.)



Date and time setting

Setting method

Select the item you want to change (year, month, date, hour, or minute) using the flap change button. The value for the selected item can be changed by pressing the help button, or by pressing the cockpit display change button.

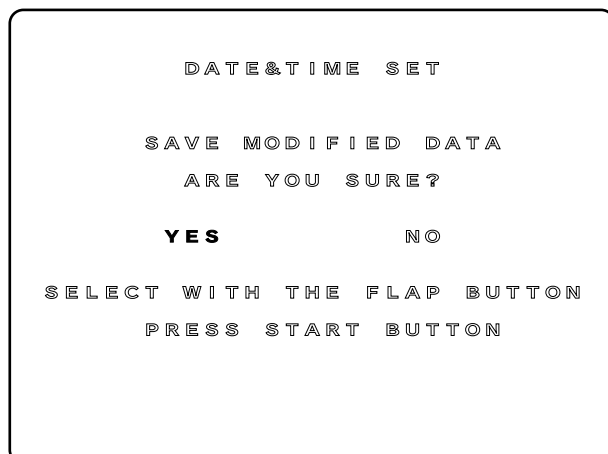


- The date and time shown on the bottom of the screen are the preset date and time.

- 3 After the settings are complete, select the “EXIT” item using the flap change button and press the start button.

Saving date and time data

- 4 If you changed the date or time, select “YES” using the flap change button. Then press the start button.



- To reset the date and time, select “NO.” Then, select the “DATE SET” item on the test mode menu using the flap change button and press the start button.

Completing the initial settings

- 1 Select the "EXIT" item using the flap change button and press the start button.



- After selecting the "EXIT" item on the screen, the game will be reset and return to the startup check screen again.
- The check screen will advance through the procedures in the following order: "Board check screen," "Opening demo screen," and "Title screen." When it is done, check the settings by playing the game.

3-4. Check the settings by playing the game

Insert coins and start the game. Also check the operation of the coin meter. To change game specification settings (difficulty level, and game fee), see "Chapter 4: Setting." The configuration of the machine when delivered is shown below.

| Items | Setting details |
|---------------|-----------------|
| DIFFCULTY | NORMAL |
| ATTRACT SOUND | ON |
| COIN | 2 COIN |
| CREDIT | 1CREDIT |
| CONTINUE | 1 COIN CONTINUE |

- 1 Insert coins to start the game. Make sure that the credit display on the top of the screen increases as you insert the coins.
- 2 Select the game type by following the screen instructions. Then start the game. (Game contents: Page 96)

Check the system operation

If any of the symptoms below occur when playing the game, the position of the operating controls may be out of adjustment. Adjust them again by following the adjustment operation procedure in the test mode.

Symptoms

- The operation on the screen does not correspond to the movement of the control column.

Cause

The position of the operating controls may be out of adjustment due to vibrations during transportation while the machine was being delivered.

Remedies

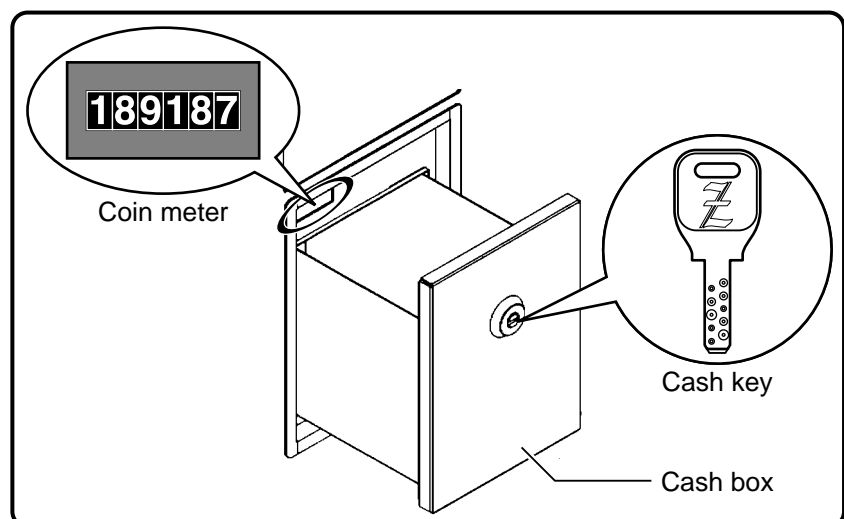
Select "ADJUSTMENT" in the test mode to adjust the system again.
(Adjustment: Page 69)

Important!

- If the arm of the airplane does not correspond to the movement of the control column, execute adjustment in the test mode.

Checking the coin meter operation

Unlock the cash box using the cash key and pull out the cash box. You will find a coin meter.



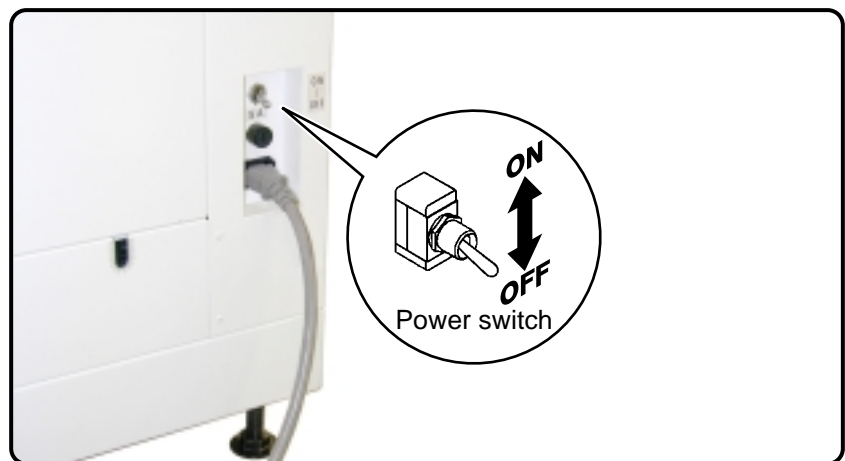
- 1** Open the cash box using the supplied cash key. Then check the figures in the coin meter.
- 2** Insert a coin. Make sure that the meter indicates the new value.

3-5. Descriptions for housing's functions

Described below are the functions of the power switch, coin meter, central control, and alarm device (optional).

3-6. Power switch

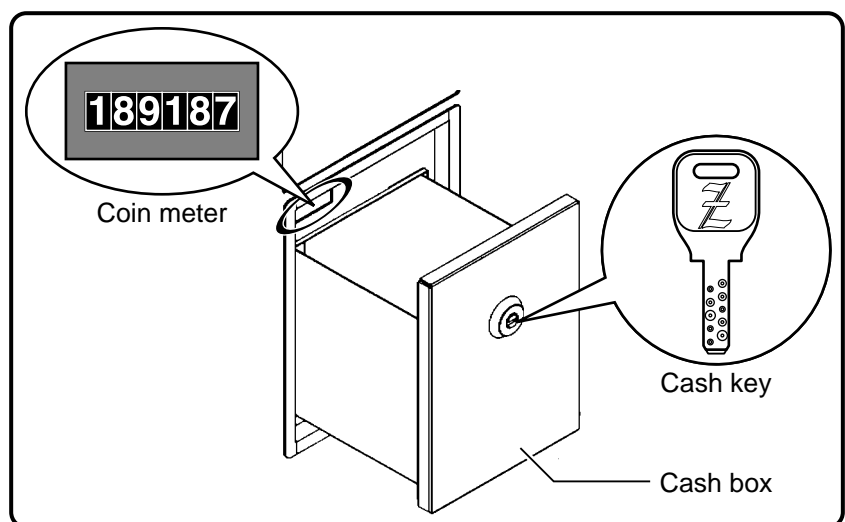
This switch is used to turn the machine ON/OFF. It is located on the lower right back of the machine. Move the switch lever up to turn "ON" the power, and move it down to turn "OFF" the power.



3-7. Coin meter

Position of the coin meter

Pull out the cash box. You will find a meter inside the cash box.



The coin meter function

Each time a coin is inserted, the meter increments the number shown by one. If a coin is inserted while in the test mode, or the game is played by pressing the service switch, the meter will not increment the number.

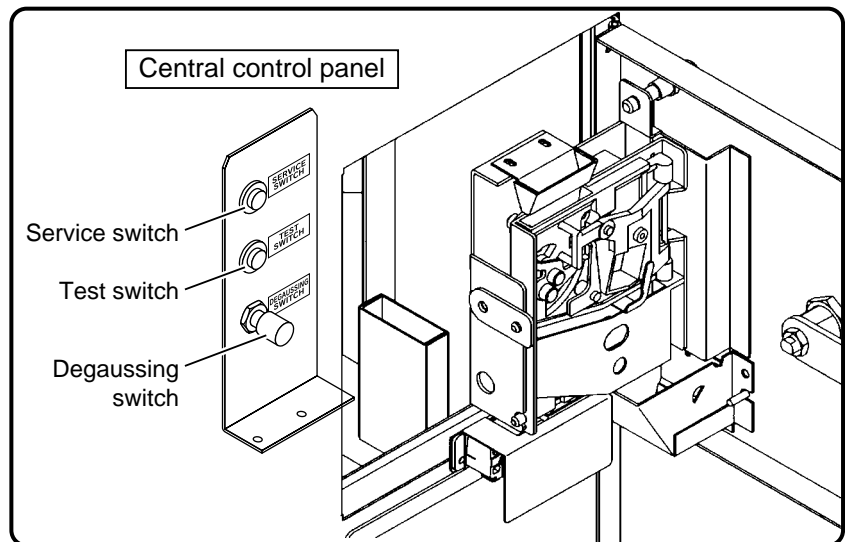
Since you can tilt the meter up, you can see the numbers on the meter from inside the coin rejection door.

3-8. Central control panel

The central control panel includes a test switch to start the test mode, the service switch, and a degaussing switch.

The location of the central control panel

Open the coin rejection door using the supplied service key. You will find the central control panel inside.



Switches

The service switch function

Each time you press the switch, you can increase the number of credits by one up to a total of 9. The coin meter is not increased by pressing this switch.

The test switch function

Used to change and operate the test mode.

(Test mode: Page 50)

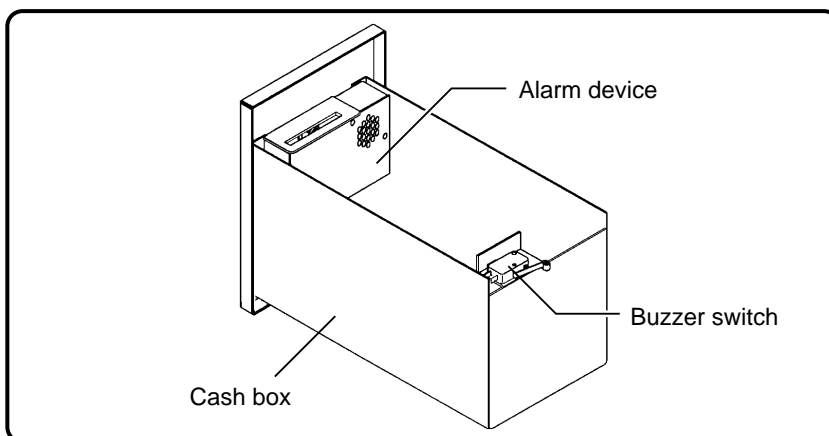
The degaussing switch

Press this switch if the screen colors are distorted.

(Eliminating color inconsistencies on the monitor screen: Page 86)

3-9. Alarm device (optional)

An optional alarm device can be installed in this machine inside the cash box, in order to protect the machine from theft. (See the illustration shown below.) This device will sound an alarm when the cash box is pried open without using the supplied cash key.



Alarm device

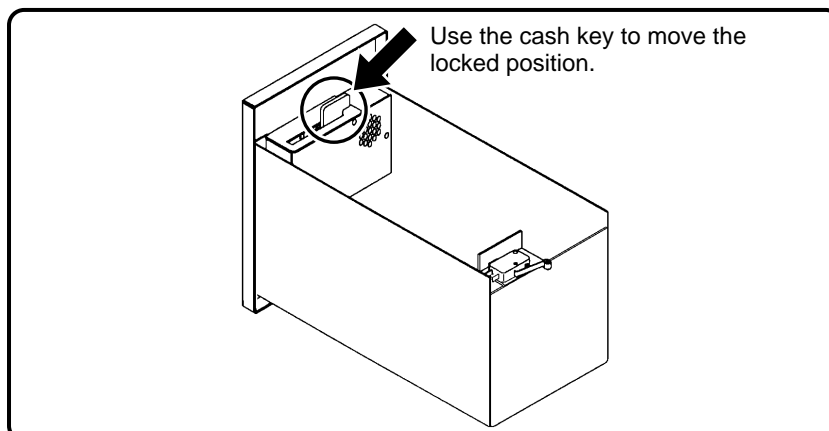
The alarm device is powered by a 9 V dry battery so that the device can be activated even when the game machine is turned OFF.

When checking the machine daily or collecting the coins, make sure that the alarm device is functioning.

When you check the alarm device, and find that it does not sound an alarm at all or only sounds it quietly, replace the dry battery. (Method for replacing the dry battery: See the next page.)

Checking the alarm device operation

Pull out the cash box. While opening the cash box, turn the cash key to the locked position. The device will sound an alarm when it is normal. If the alarm is not loud enough, replace the dry battery. (Method for replacing the dry battery: See the next page.)

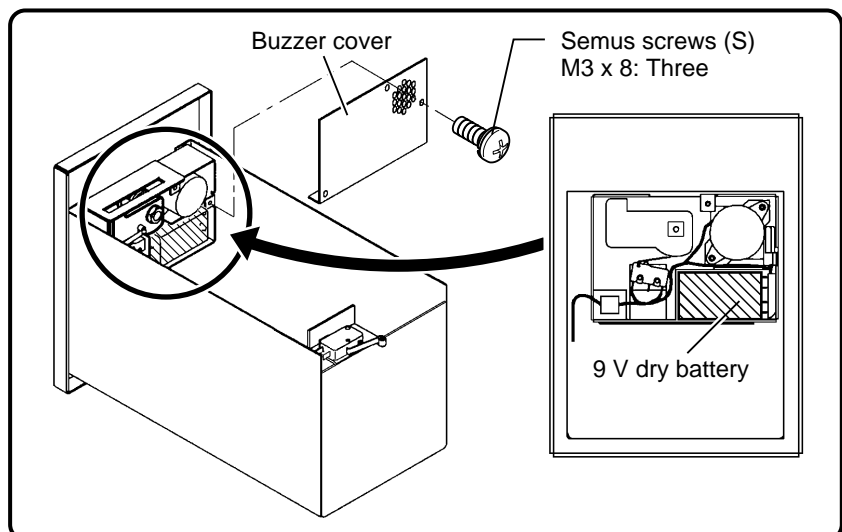


Method for replacing the dry battery

⚠ CAUTION

Be careful not to injure yourself on the edges of the metal plates when working with the game machine.

- 1** Remove the buzzer cover from the alarm device, as shown in the figure below. Be careful not to injure yourself on the edges of the metal plates when working with the game machine.
- 2** Remove the dry battery and replace it with a new battery. Use a commercially available 9 V dry battery.



- 3** After replacing the dry battery, make sure to check the device battery operation. If the alarm device is operating normally, install the buzzer cover as it was, and close the cash box.

Chapter 4 Setting

4-1. Test mode

Set the game configurations, adjust the sound volume, and the test operation of each switch.

Important!

- The settings in the test mode should only be changed by shop maintenance personnel or game engineers.

4-2. Method for starting the test mode

When the test mode is started, any play credits remaining in the machine will be deleted. Before starting the test mode, make sure that there are no credits remaining in the machine.

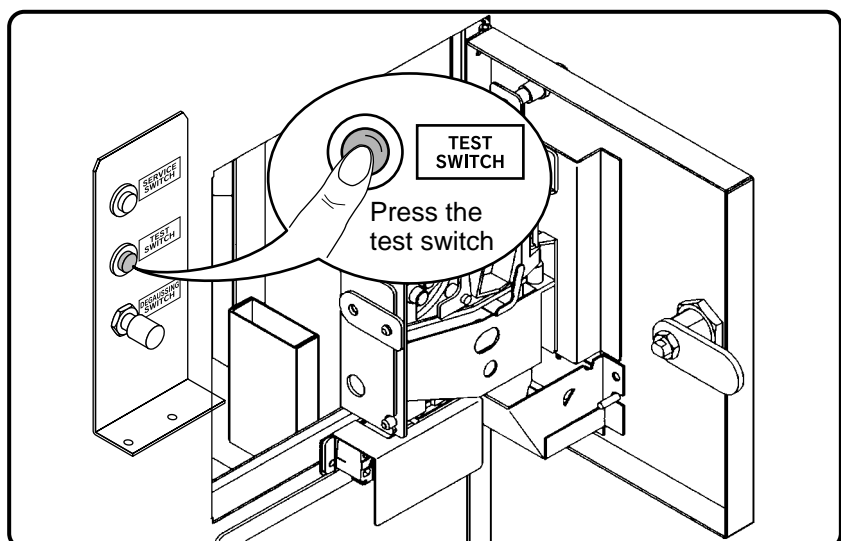
Important!

- When the test mode is started, any play credits remaining in the machine will be deleted.

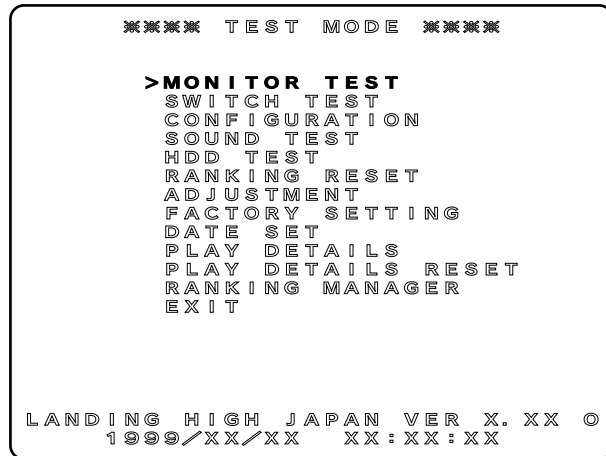
1 Turn the power switch ON.

2 Open the coin rejection door using the supplied service key.

3 Press the left test switch inside the door.



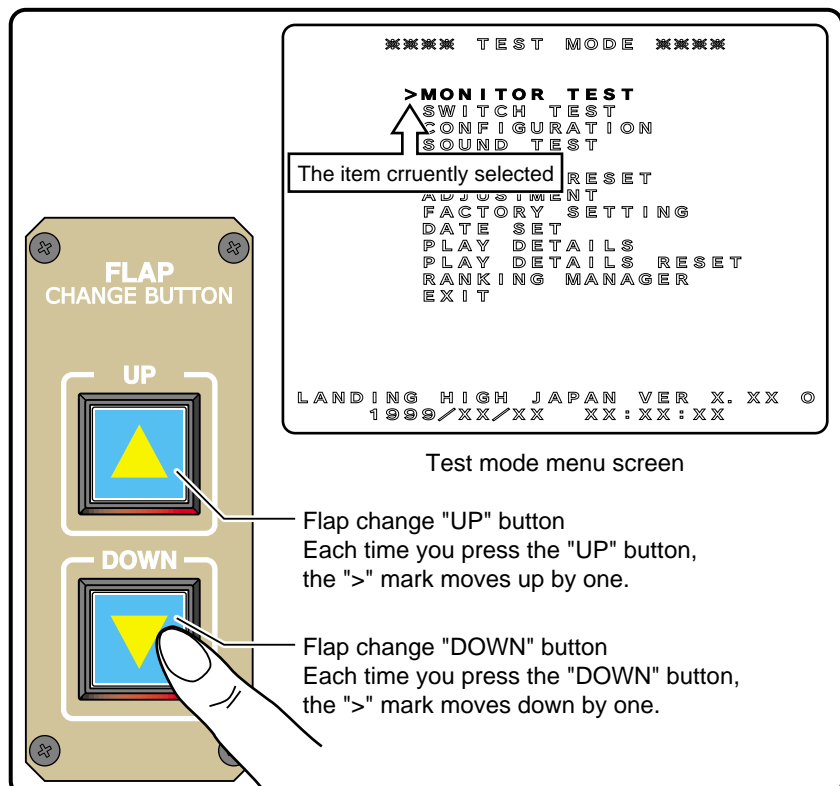
- 4** After starting the test mode, the test mode menu will appear on the monitor screen.



4-3. Test mode operations method

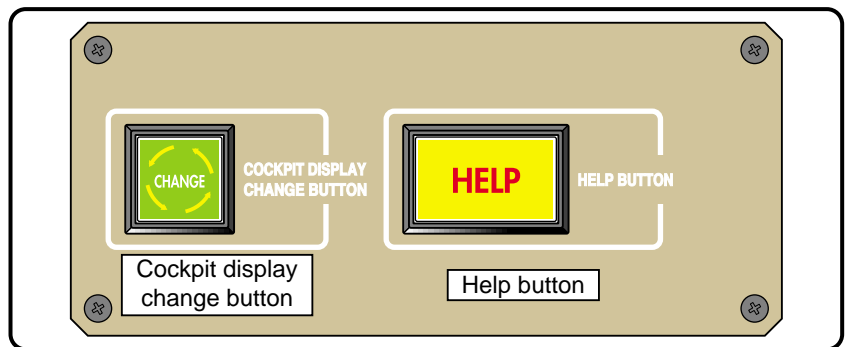
Selection of each item

To select each item, use the two flap buttons. A ">" cursor will be positioned to the item currently selected, and the selected characters will be red. Move the cursor backward by pressing the up button, and forward by pressing the down button.



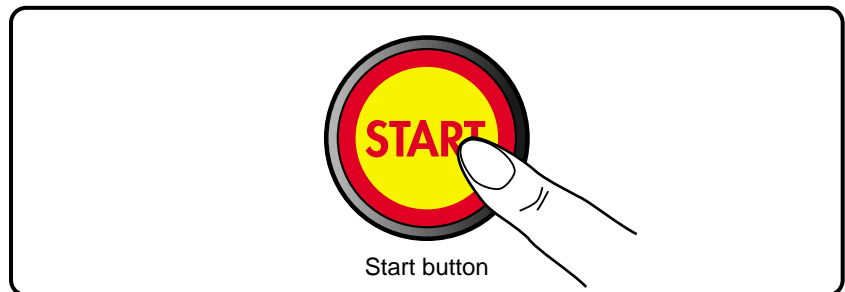
Changing an item's setting

To change the setting details or numeric values, use the help button to increase, and cockpit display change button to decrease.



Storing settings

Press the start button to save the settings.



4-4. Quitting the test mode

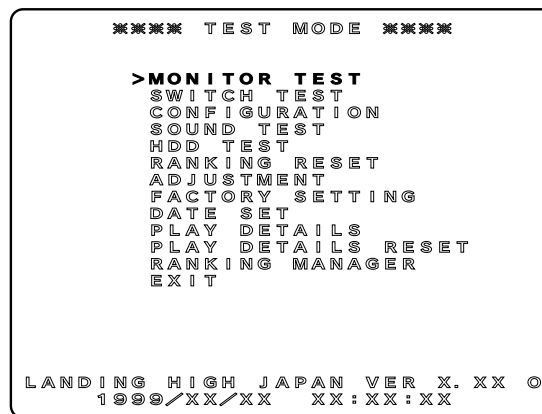
Select the "EXIT" item on the menu using the view change button. Then press the start button. The test mode will terminate. After terminating the test mode, the machine will be reset.



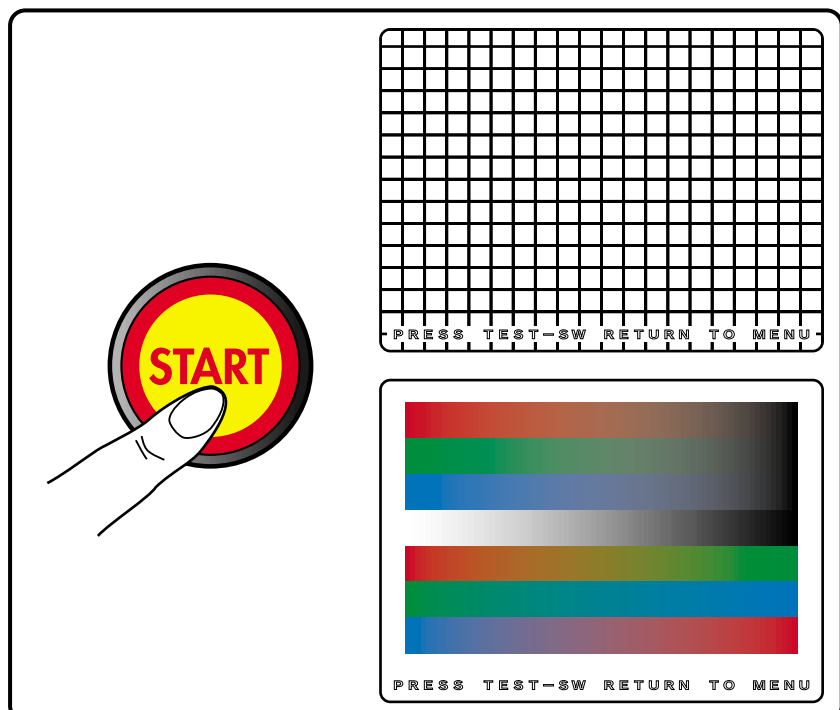
4-5. Checking the screen display dimensions and color

Check the screen dimensions and color on the "MONITOR TEST" menu.

- 1** Start the test mode.
(Method for starting the test mode: Page 50)
- 2** Select the "MONITOR TEST" item on the menu using the view change button. Then press the start button.



- 3** Crosshatch will appear on the CRT and LCD screen. Each time you press the start button, the screen will change between color bar and crosshatch.



- 4** When the screen display size and color are not normal, adjust them by referring to section 5-2, "Adjustment of the monitor screen," in chapter 5. (Adjustment of the monitor screen: Page 87)
The liquid crystal display can be adjusted only in brightness. (For adjustment of the brightness for the liquid crystal display monitor, see page 89.)

Important!

- To adjust the monitor, see section 5-2, "Adjustment of the monitor screen."
- The monitor adjustment should only be done by shop maintenance personnel or engineers.

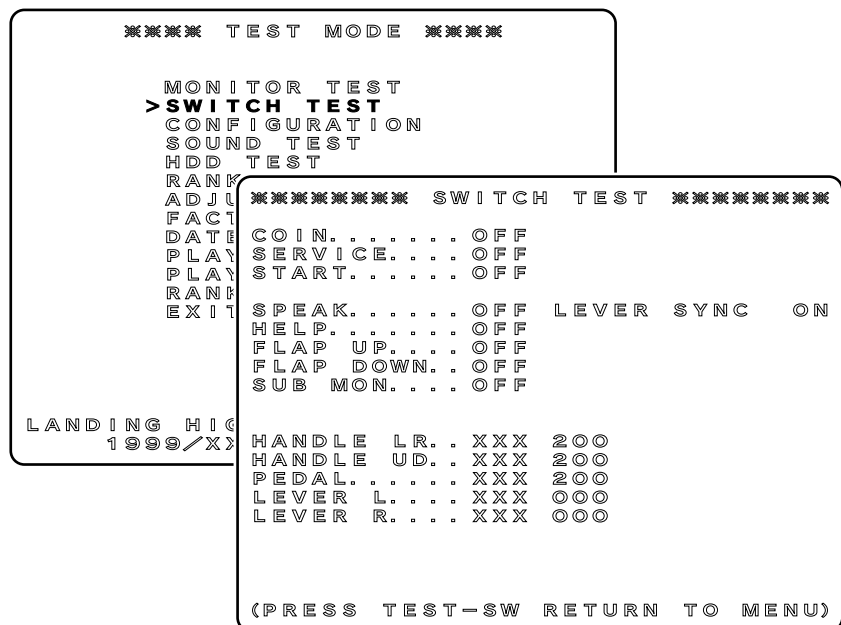
- 5** Press the test switch. The crosshatch or color bar display will return to the menu.
- 6** Quit the test mode. If you want to stay in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-6. Checking input items

Check the condition of each switch, lever, pedals, and lamps in the “SWITCH TEST” item.

- 1** Start the test mode.
(Method for starting the test mode: Page 50)

- 2** Select the “SWITCH TEST” item on the menu using the view change button. Then press the start button.



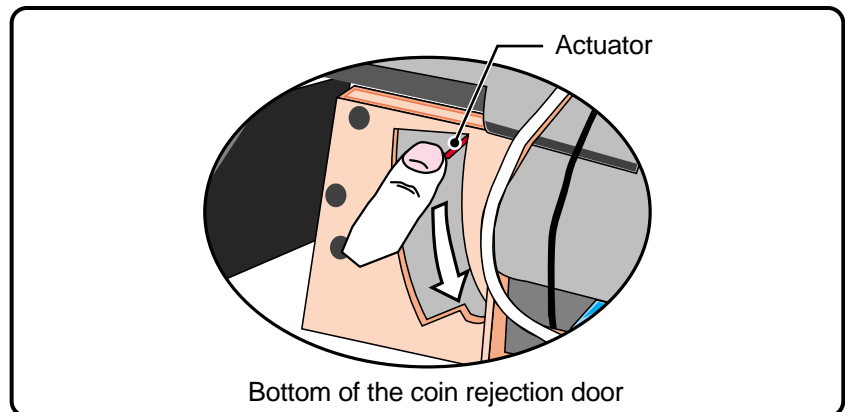
| Items | Display details | Detection result |
|------------|---|--|
| COIN | Detect input from the coin switch. | · When an input is detected, “ON” is displayed. When no input is detected, “OFF” is displayed. |
| SERVICE | Detect input from the service switch. | |
| START | Detect input from the start button. | |
| SPEAK | Detect input from the speak button. | · When the service switch is pressed, the coin lockout coil will be energized. |
| HELP | Detect input from the help button. | |
| FLAP UP | Detect input from the flap up button. | |
| FLAP DOWN | Detect input from the flap down button. | · When a button is pressed, the respective lamp will light. |
| SUB MON | Detect input from the cockpit display change button. | |
| LEVER SYNC | Detect whether the thrust levers L and R are in the same position. | · If the positions of the left and right levers match, “ON” will be displayed, and if the positions of the left and right levers deviate, “OFF” will be displayed. |
| HANDLE LR | Detect the inclination of the control column to the left or right. | · Display the current value (between 000 and 3FF.) |
| HANDLE UD | Detect the position of the control column in the forward and back directions. | |
| PEDAL | Detect input from the rudder pedal. | |
| LEVER L | Detect input from the left thrust lever. | |
| LEVER R | Detect input from the right thrust lever. | |

How to check the switch input

Operate each switch. If the screen display changes from OFF to ON, the switch is normal.

Coin switch

Check the coin switch on the bottom of the coin rejection. Press down lightly on the actuator of the coin switch. If the screen display changes from OFF to ON, it is normal.



Service switch

Press the service switch. If the screen display changes from OFF to ON, it is normal.

Start button / cockpit display change button / help button / flap change button / speak button

Press each of the buttons. If the screen display changes from OFF to ON, it is normal.

How to check the operation of the coin lockout coil and each of the lamps

Since the operations of these items cannot be checked on the screen, follow the procedures described below to check these items.

- To check the operation of the coin lockout coil, press the service switch.
- To check the lamps, press each button.

Method for checking the input of each operating section

When moving the control stick, rudder pedals, and thrust levers, the direct value and detected value on the screen will change according to the operation.

SWITCH TEST

COIN..... OFF
 SERVICE..... OFF
 START..... OFF

SPEAK..... OFF LEVER
 HELP..... OFF
 FLAP UP..... OFF
 FLAP DOWN..... OFF
 SUB MON..... OFF

HANDLE LR. XXX 200
 HANDLE UD. XXX 200
 PEDAL. XXX 200
 LEVER L. XXX 000
 LEVER R. XXX 000

(PRESS TEST-SW RETURN TO MENU)

Direct value: Direct output value from the variable resistor.
 Detected value: Value detected on the position during operation. If adjustment has been made, it will be displayed between 000 and 3FF.

For correct detected values during operation, see the table below. If the detected value on the screen will not change by an actual operation, or the detected value is different from the value in the table, you need to make an adjustment. (Adjustment : Page 69.)

Method for checking the operation of the control column

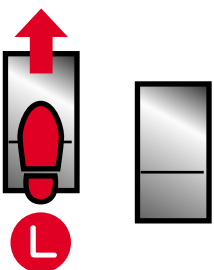
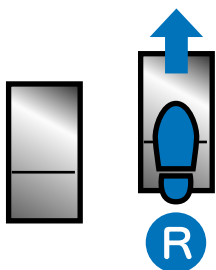
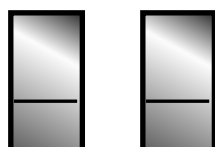
Checking the input of HANDLE L/R: Move the handle of the control column to the left and right.

| | | |
|--|---|---------------------|
| | | |
| Position when it is turned all the way to the left | Position when it is turned all the way to the right | Level position |
| Detected value: 000 | Detected value: 3FF | Detected value: 200 |

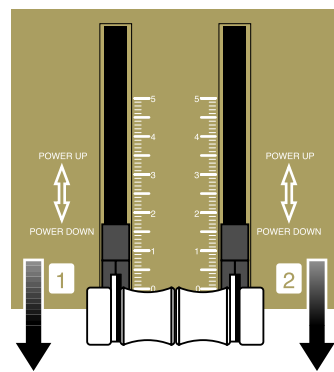
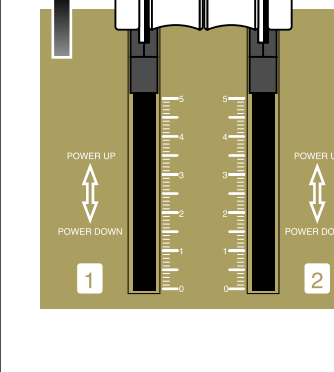
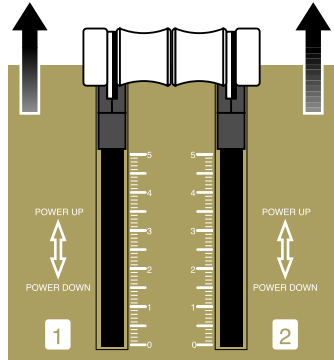

Checking the input of HANDLE U/D: Move the control stick back and forth.

| | | |
|---|---|--|
| | | |
| Position when it is pushed all the way down | Position when it is pulled all the way up | Position when you release the control stick and it is kept still |
| Detected value: 000 | Detected value: 3FF | Detected value: 200 |

Method for checking the operation of the rudder pedal

| Checking the input of PEDAL: Press the left and right pedals. | | |
|---|--|---|
|  |  |  |
| Press the left pedal all the way down | Press the right pedal all the way down | Position when you release the pedals and they are kept still |
| Detected value: 000 | Detected value: 3FF | Detected value: 200 |

Method for checking the operation of the thrust lever

| Checking the input of LEVER L and LEVER R: Move each lever back and forth. | | | |
|---|---|---|---|
|  |  |  |  |
| Pull down the left lever | Pull down the right lever | Move up the left lever | Move up the right lever |
| Detected value: 000 | Detected value: 000 | Detected value: 3FF | Detected value: 3FF |

If an error occurs

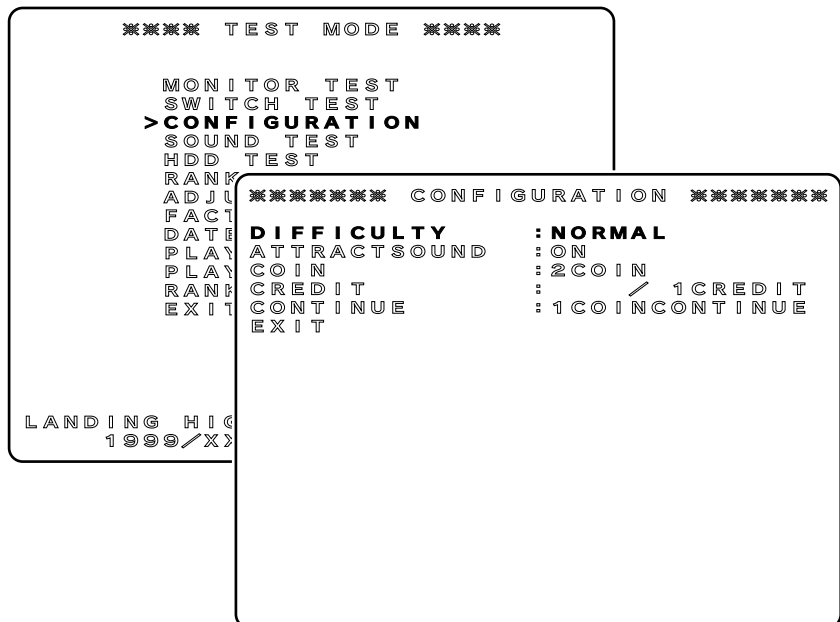
If any of the input devices does not operate properly, please contact your dealer.

- 3** Press the test switch. The display will return to the menu screen.
- 4** Quit the test mode. If you want to stay in the test mode, select another item on the menu.
(Method for quitting the test mode: Page 52)

4-7. Setting the game configuration

You can change the level of difficulty, the attract sound (sound played during a demonstration) and coin setting, on the "CONFIGURATION" menu.

- 1 Start the test mode.
(Method for starting the test mode: Page 50)
- 2 Select the "CONFIGURATION" item on the menu using the flap change button. Then press the start button.



Operation method

Select an item using the flap change button. The contents of the setting can be changed by pressing the help or cockpit display change button.

| Items | Screen display | Display details |
|---------------|----------------------|--|
| DIFFICULTY | EASY | Easy |
| | NORMAL | Normal |
| | HARD | Hard |
| | HARDEST | Hardest |
| ATTRACT SOUND | ON | Plays sounds in the demonstration mode |
| | OFF | Does not make a sound in the demonstration mode |
| COIN | 1 TO 10 COIN (S) | Number of coins per game. |
| | FREE PLAY | Free game |
| CREDIT | 1 TO 5 CREDIT (S) | Number of games to be able to play. |
| CONTINUE | 1 TO 9 COIN CONTINUE | Number of coins to continue the game by per game |
| | SAME AS PLAY | Specify the same number of coins to play. |
| | NO CONTINUE | No continued play |

DIFFICULTY

There are 4 difficulty levels. Each level has different clear points.

ATTRACT SOUND (music during demonstration)

You can select whether to emit sound in the demonstration mode.

COIN

You can change the setting for the items "1-10 COIN(S)" and "FREE PLAY." If you select "FREE PLAY," any setting for the CREDIT item will be ignored. If you do this, the "FREE PLAY" message will appear on the center of the screen during the demonstration mode, and now you can play the game by pressing the start button to start the game.

CREDIT (number of plays)

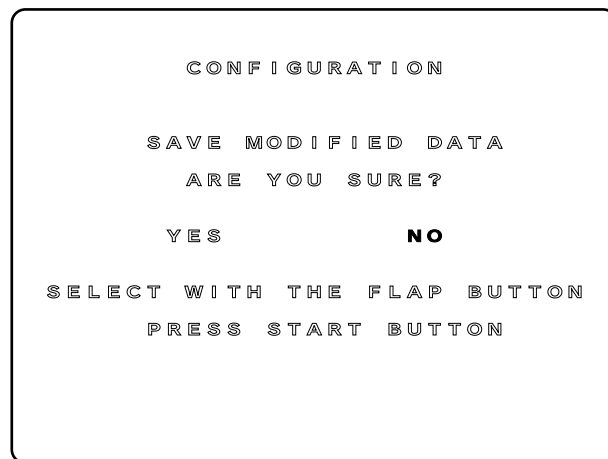
The number of credits can be set between 1 and 5. When free play is selected, dashes will be displayed and the credit setting will be invalid.

CONTINUE

You can specify this setting as the same as the game fee or less. To disable the continue mode, select "NO CONTINUE." If the number of credits is set to 2 or more, you have to choose from "SAME AS PLAY" or "NO CONTINUE."

- After the configuration settings are complete, select the "EXIT" item using the flap change button. Then press the start button.

- 4 The screen will change to a confirmation screen for the configuration items you have changed. Select "YES" or "NO," following the screen instructions.



- Save: Select "YES" by using the flap change button. Then press the start button.
- Do not save: Select "NO" by using the flap change button. Then press the start button.

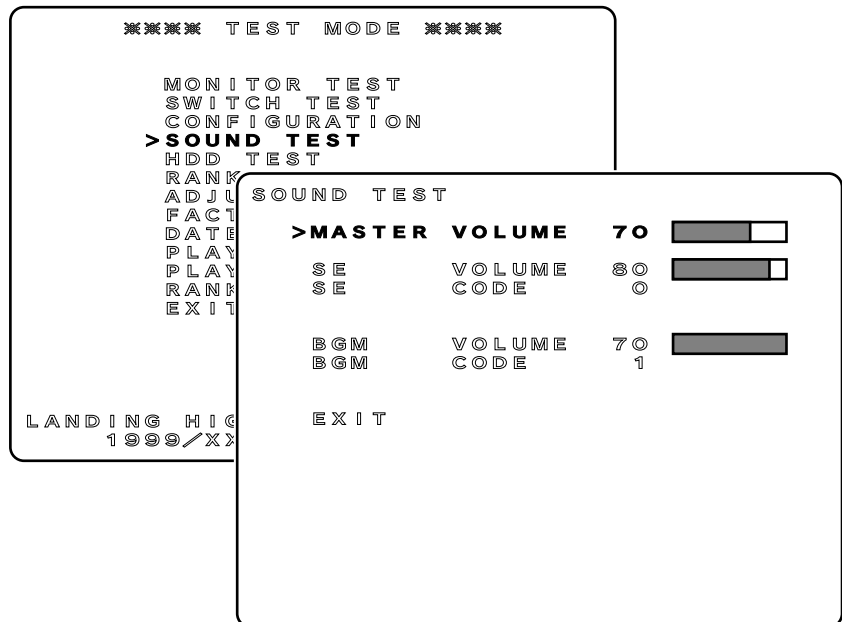
- 5 When "YES" is selected, and the start button is pressed, the configuration changes you made will be saved. Then the screen will return to the menu. (When "NO" is selected, and the start button is pressed, the configuration changes you made are not saved. Then the screen will return to the menu.)
- 6 Quit the test mode. When you want to continue in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-8. Sound test

Check the sounds made during the game (music and sound effects) and adjust the volume in the “SOUND TEST” item.

- 1** Start the test mode.
(Method for starting the test mode: Page 50)

- 2** Select the “SOUND TEST” item on the menu using the flap change button. Then press the start button.



| Items | Display details | Range (factory set value) |
|---------------|--|---------------------------|
| MASTER VOLUME | Master speaker volume | 100 to 0 (70) |
| SE VOLUME | Volume of the sound effects | 100 to 0 (80) |
| SE CODE | Number of the sound effect you will hear during a test | 335 to 0 (0) |
| BGM VOLUME | BGM volume | 100 to 0 (70) |
| BGM CODE | BGM tune number you will hear during a test | 16 to 0 (1) |

Operation method

Select an item using the flap change button. The contents of the setting can be changed by pressing the help or cockpit display change button.

To adjust the MASTER VOLUME

Select the "MASTER VOLUME" item using the flap change button. The volume setting can be changed by pressing the help or cockpit display change button. Then press the start button to start the sound you selected in the "BGM CODE" item at the new volume setting.

To adjust the SE (sound effects) volume

Select the "SE VOLUME" item using the flap change button. The SE volume can be changed by pressing the help or cockpit display change button. Then press the start button to hear the sound specified in the "SE CODE" at the new volume.

To listen the SE (sound effects)

Select the "SE CODE" item using the flap change button. Then press the start button. The machine will play the sound effect for the code number selected. The sound effect volume is displayed in the "SE VOLUME" item.

To adjust the BGM volume

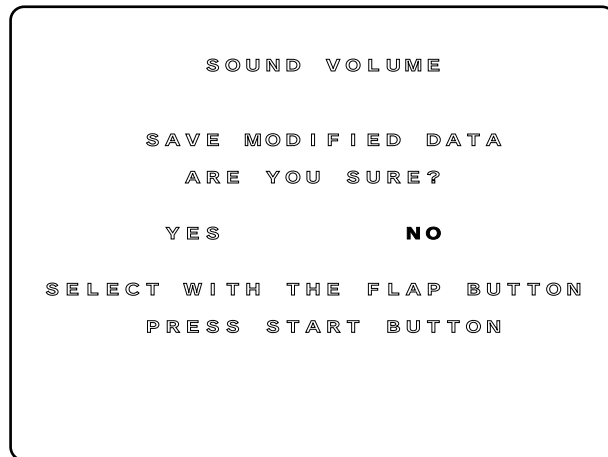
Select the "BGM VOLUME" item using the flap change button. The BGM volume can be changed by pressing the help or cockpit display change button. Then press the start button to hear the sound specified in the "BGM CODE" at the new volume.

To listen the BGM

Select the "BGM CODE" item using the flap change button. Then press the start button. The BGM for the selected code number will be played. The BGM volume is displayed in the "BGM VOLUME" item.

- 3** After the sound check and volume setting are complete, select the "EXIT" item using the flap change button. Then press the start button.

- 4 The screen will change to a confirmation screen for the configuration items you have changed. Select "YES" or "NO," following the screen instructions.



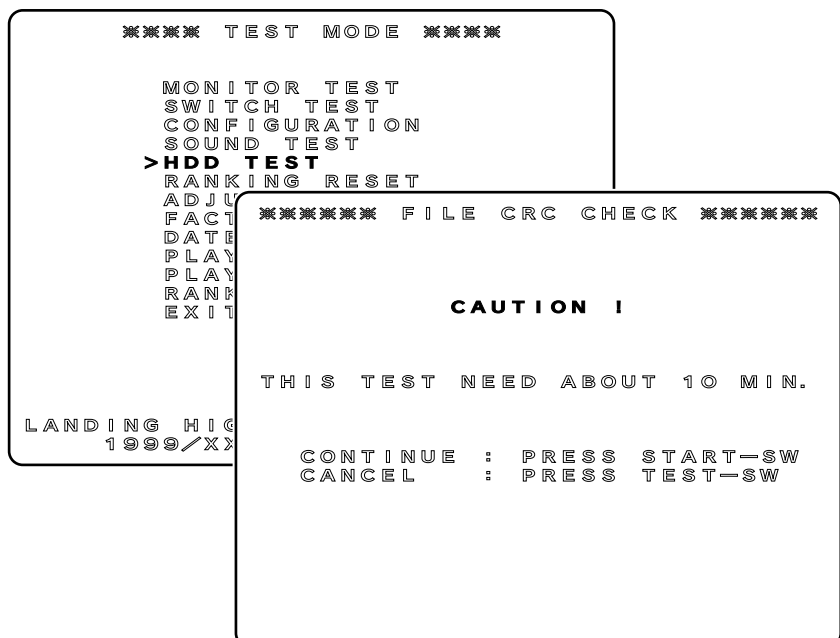
- Save: Select "YES" by using the flap change button. Then press the start button.
- Do not save: Select "NO" by using the flap change button. Then press the start button.

- 5 When "YES" is selected, and the start button is pressed, the configuration changes you made will be saved. Then the screen will return to the menu. (When "NO" is selected, and the start button is pressed, the configuration changes you made are not saved. Then the screen will return to the menu.)
- 6 Quit the test mode. When you want to continue in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

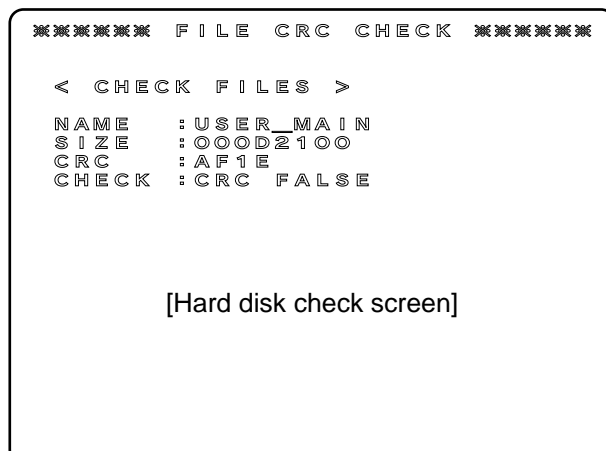
4-9. Hard disk test

Check the contents of the hard disk with the “HDD TEST.”

- 1 Start the test mode.
(Method for starting the test mode: Page 50)
- 2 Select the “HDD TEST” item on the menu screen using the flap change button. Then press the start button.



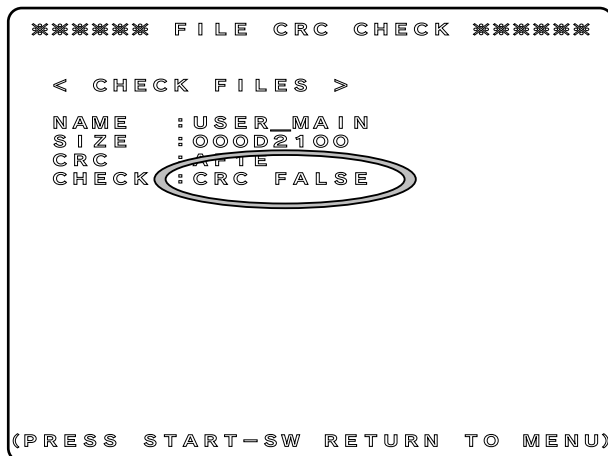
- 3 Press the start button to check the hard disk. It will take approximately 10 minutes to complete the check. If you want to skip the check, press the test switch.



| Items | Display details |
|-------|--|
| NAME | The file name currently being checked |
| SIZE | File size |
| CRC | Alignment of file currently being checked |
| CHECK | Data status If the "CRC FALSE" message is displayed, the data may be damaged. |

HDD TEST

Check the contents of the hard disk. If there is an error, the "CRC FALSE" message will be displayed.



When there is no hard disk error

When there is no hard disk error, "COMPLETE" will be displayed on the screen and the machine will wait for you to press the start button.

If the hard disk reports an error

If the "CRC FALSE" message is displayed, the hard disk may be damaged. If there is a problem, please contact your dealer, and replace the hard disk immediately. (Replacing the hard disk assembly in Chapter 7: Page 111)

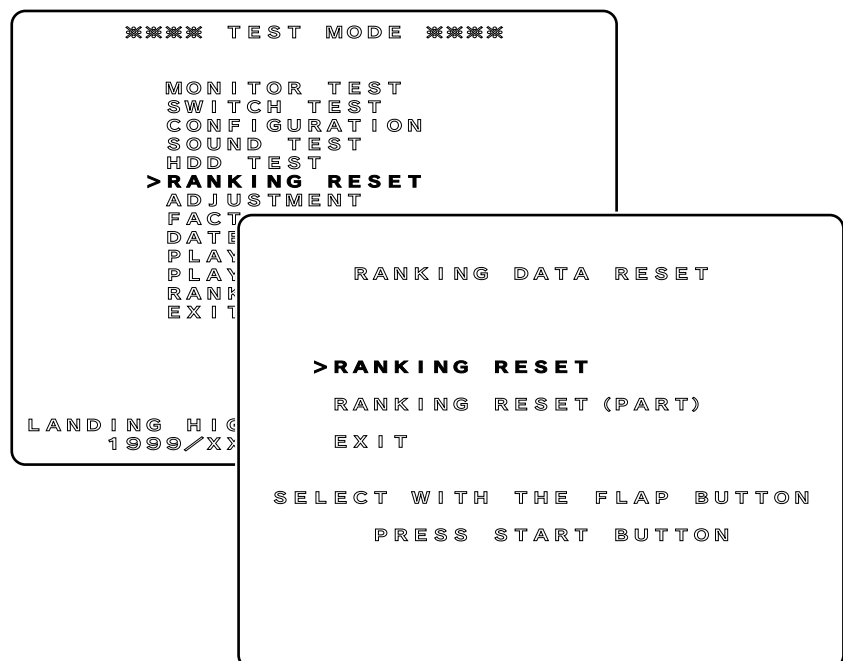
4 Press the start button. The screen will return to the menu.

5 Quit the test mode. When you want to continue in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-10. Initializing the rankings list

Initialize the score ranking with the "RAKING RESET" item.

- 1 Start the test mode.
(Method for starting the test mode: Page 50)
- 2 Select the "RAKING RESET" item on the menu using the flap change button. Then press the start button.



RANKING RESET

Used to clear all of the ranking data and return to the factory setting.

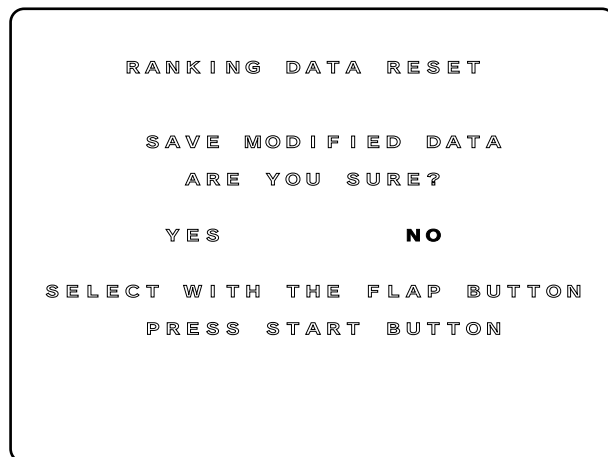
RANKING RESET (PART)

Used to clear the data, except for the top ranked data.

EXIT

Used to return to the menu screen. Select the "EXIT" item using the flap change button, and press the start button.

- 3 Select either type of reset method using the flap change button, and press the start button. The screen will change to a configuration screen checking whether you want to reset the ranking data. Select "YES" or "NO" following the screen instructions. (The figure below shows when the "RANKING RESET" item is selected.)



- Execute: Select "YES" by using the flap change button. Then press the start button.
- Do not execute: Select "NO" by using the flap change button. Then press the start button.

- 4 When "YES" is selected, and the start button is pressed, the score rankings will be reset. Then the screen will return to the menu. It will take a few seconds to erase the data. (When "NO" is selected, and the start button is pressed, the score rankings will not be reset. Then the screen will return to the menu.)
- 5 Quit the test mode. When you want to continue in the test mode, select another item on the menu. (Quitting the test mode: Page 52)

4-11. Adjustment

Adjust the position of the control column, ruddre pedal and thrust lever with the "ADJUSTMENT" menu.

Important!

- Be sure to adjust these items every time after transporting and installing the machine. If the adjustments are not made, the game controls will not be aligned and the game will not operate normally.
- These adjustments should only be made by shop maintenance personnel or game engineers.

Adjustment

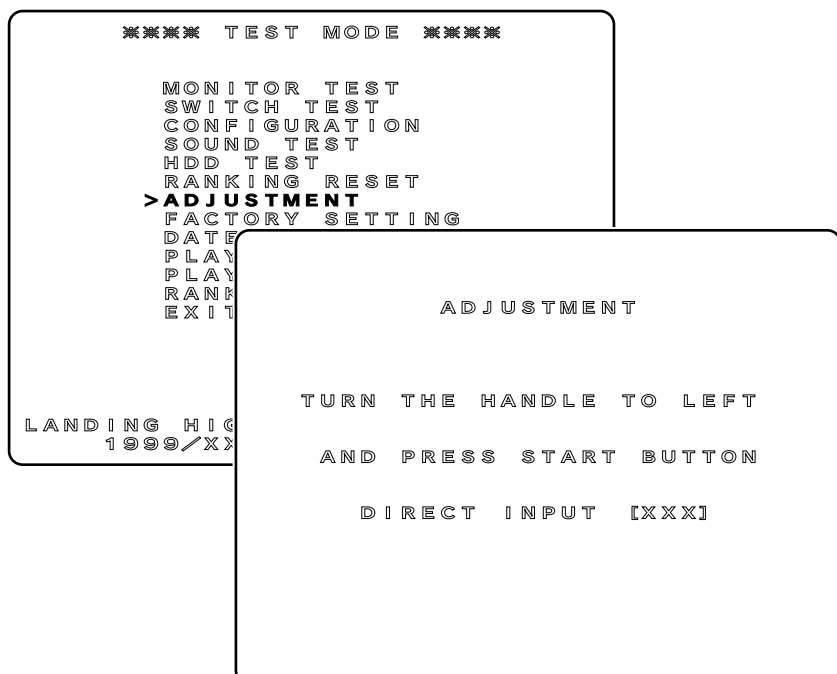
Even though the machine was adjusted before being delivered, the positions of the game controls may be out of adjustment due to vibration during transportation.

After installing the machine, be sure to check the adjustments in the test mode, and update the default values for each operating system.

1 Start the test mode.

(Method for starting the test mode: Page 50)

2 Select the "ADJUSTMENT" item on the menu using the flap change button. Then press the start button.



Adjustment method

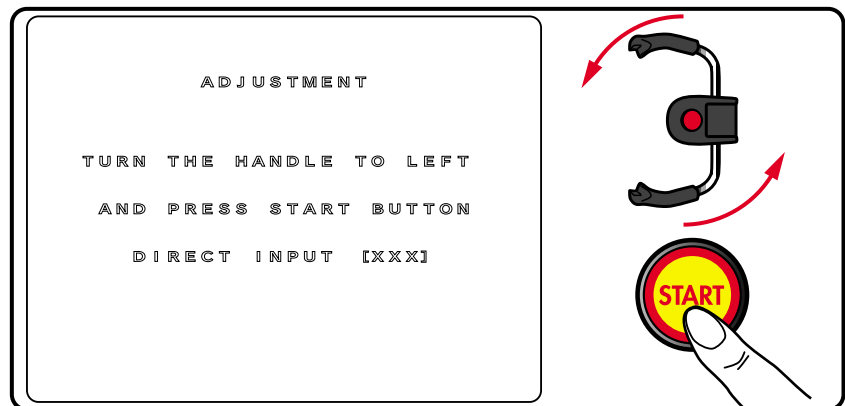
1. Adjust the control column to the left or right.
2. Adjust the control column forward or back.
3. Adjust the rudder pedals.
4. Adjust the thrust levers.

Make adjustments in the order shown above.

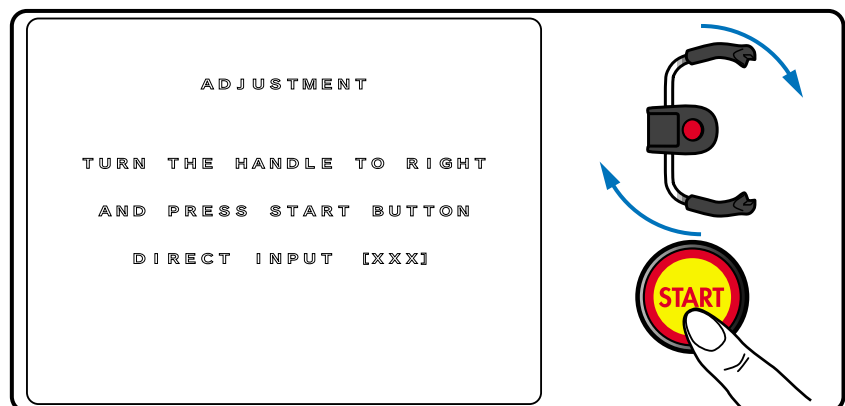
Move each in the direction shown on the screen, and press the start button. Then, complete the adjustment and the screen goes to the next step. There are 13 adjustment processes in total.

Adjusting the control column to the left or right

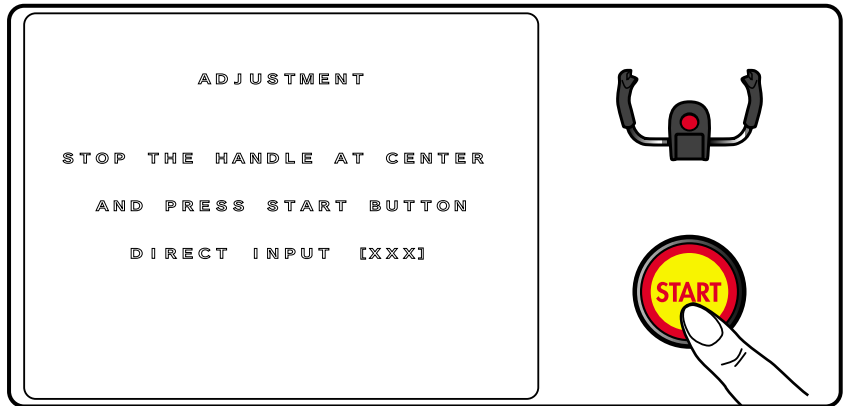
- 1** Turn and hold the control column all the way to the left. Then, press the start button.



- 2** Turn and hold the control column all the way to the right. Then, press the start button.

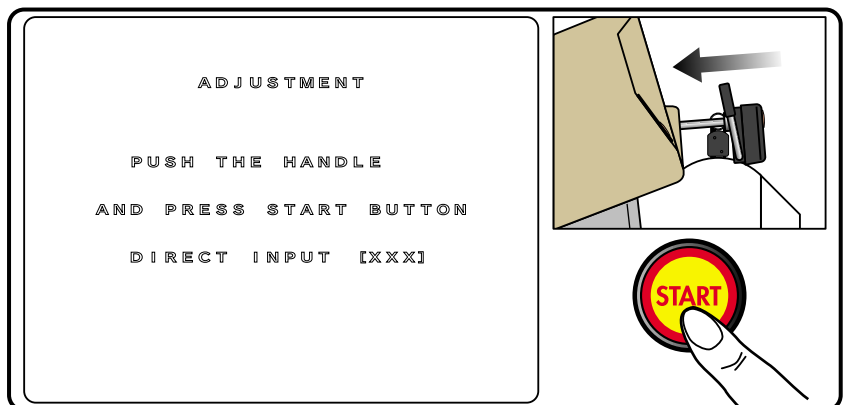


- 3** Return the control column to the center position. Then, press the start button.

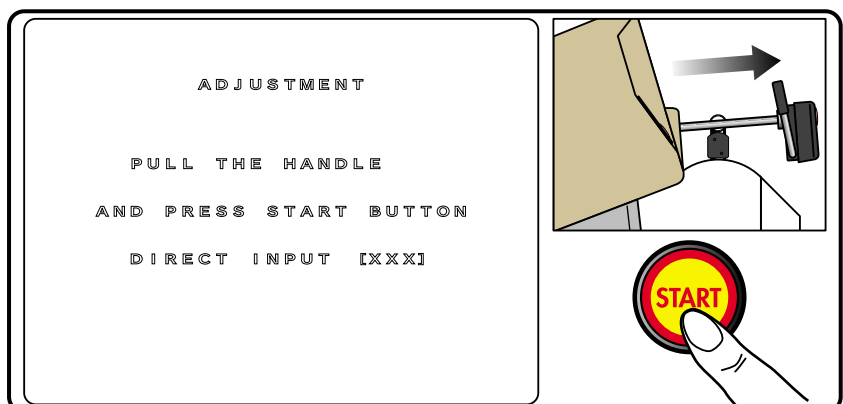


Adjusting the control column to forward or back

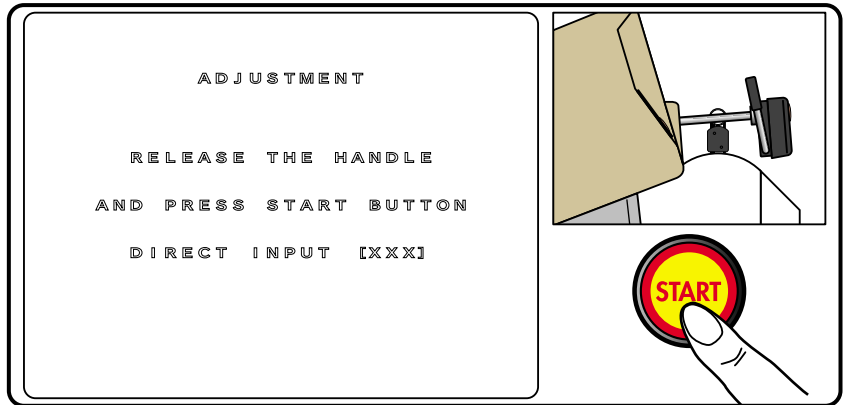
- 4** Press the control column all the way down and then press the start button.



- 5** Pull the control column all the way up and then press the start button.

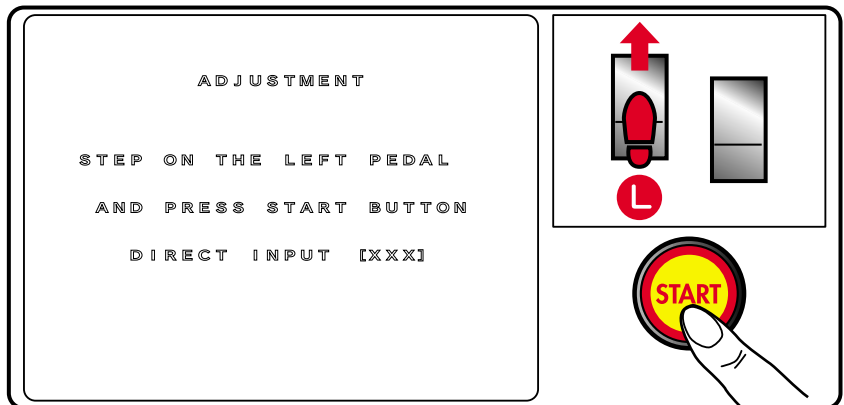


- 6 Release the control column and then press the start button.

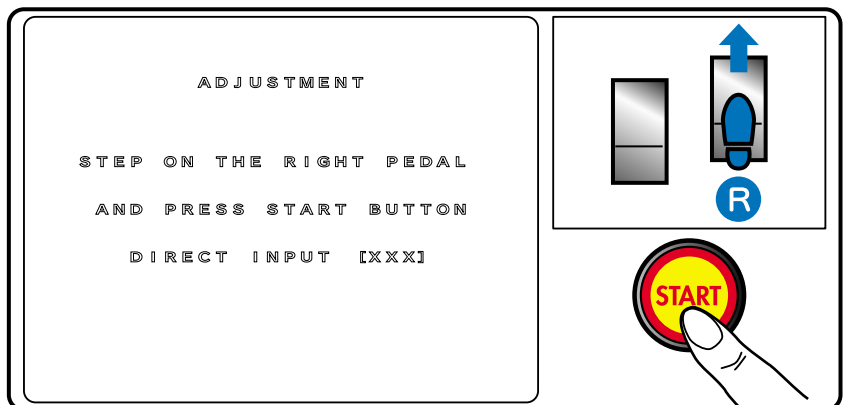


Adjusting the rudder pedals

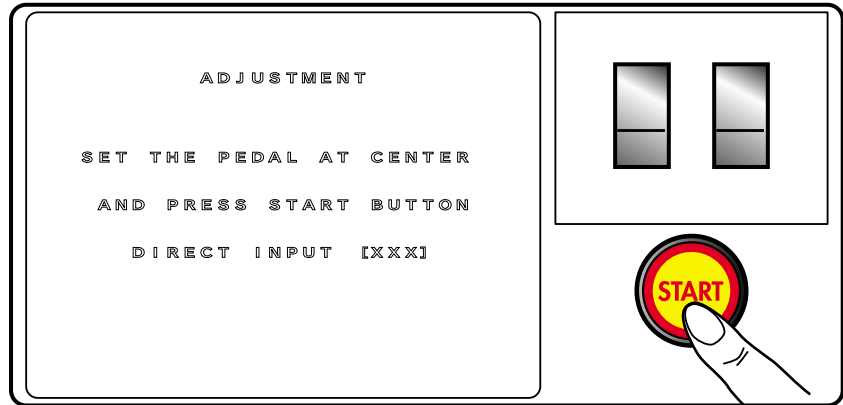
- 7 Press the left rudder pedal all the way down and then press the start button.



- 8 Press the right rudder pedal all the way down and then press the start button.

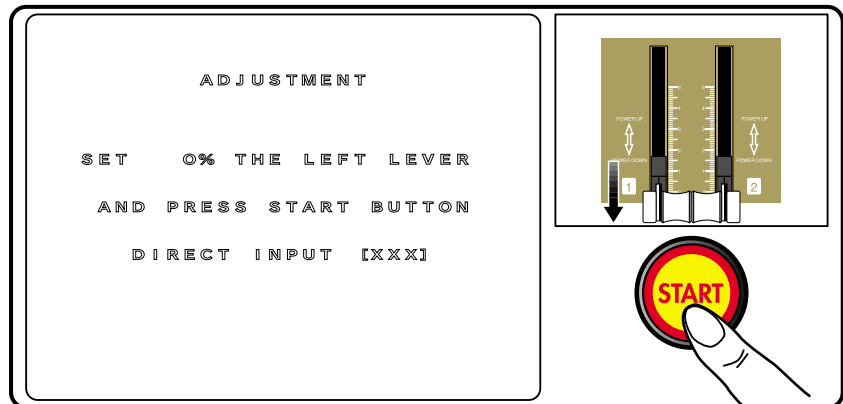


- 9** Release the rudder pedal and then press the start button.

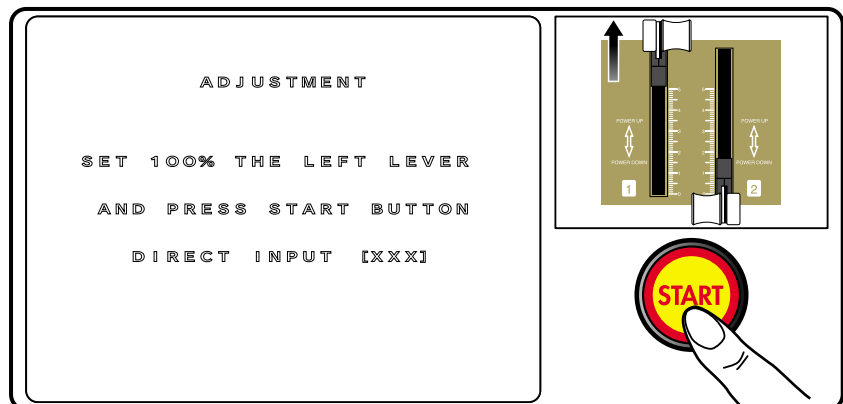


Adjusting the thrust levers

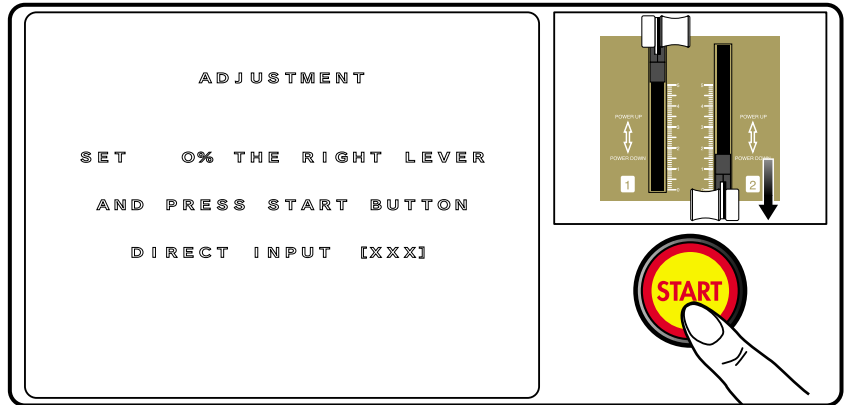
- 10** Down the left thrust lever and then press the start button.



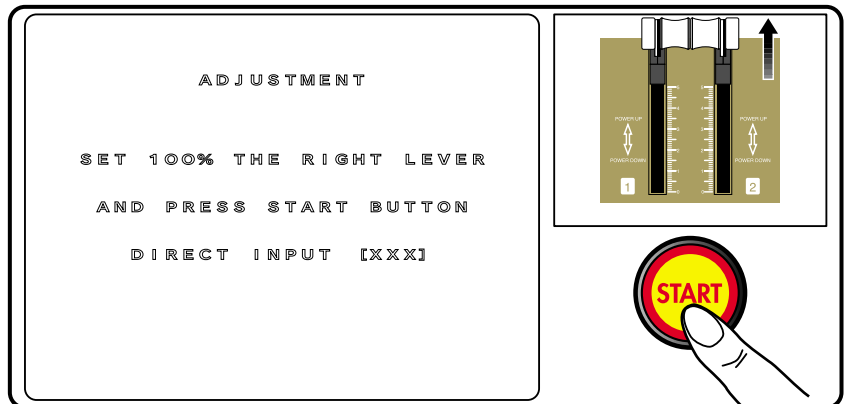
- 11** Up the left thrust lever and then press the start button.



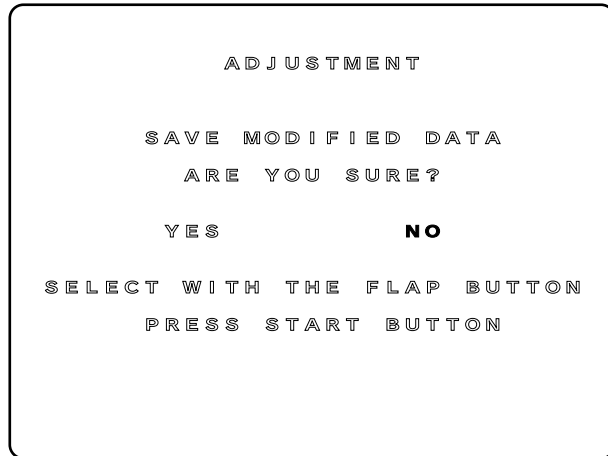
- 12** Down the right thrust lever and then press the start button.



- 13** Up the right thrust lever and then press the start button.



- 14** After you complete adjusting the right thrust lever, the screen will change to a screen asking you whether to save the adjustment data. Select "YES" or "NO," following the screen instructions.



- Save: Select "YES" by using the flap change button. Then press the start button.
- Do not save: Select "NO" by using the flap change button. Then press the start button.

15 When "YES" is selected, and the start button is pressed, the adjustments you made are saved. Then the screen will return to the menu. (When "NO" is selected, and the start button is pressed, the adjustments you made are not saved. Then the screen will return to the menu.)

16 Quit the test mode. When you want to continue the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-12. Initializing the game configuration

Initialize the game configuration (reset the game configuration to the condition when delivered) by selecting the "FACTORY SETTING" item.

Important !

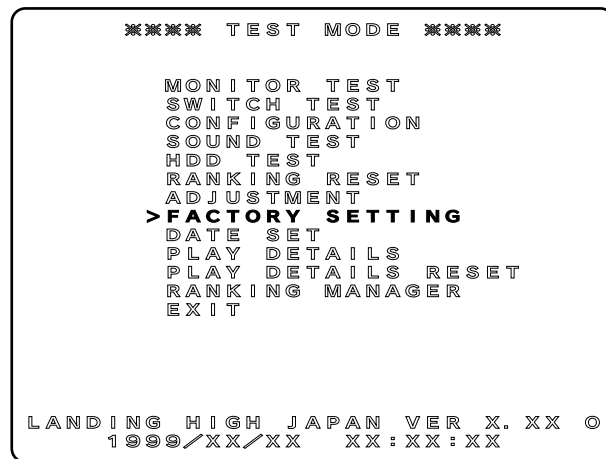
- If you execute the "FACTORY SETTING" item, the adjustment and the date and time setting screens will be displayed automatically. Be sure to perform all of the adjustments and settings, following the screen instructions.

Factory setting

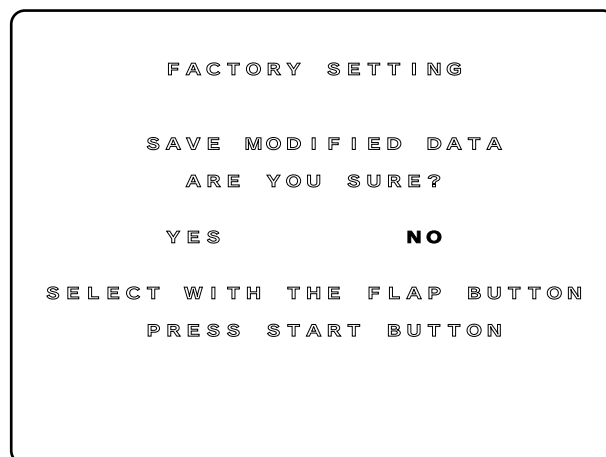
After executing the FACTORY SETTING function, the game configuration, sound settings, date and time settings, and adjustments will be all reset, as shown below.

| Configuration | |
|---|-----------------|
| Items | Setting details |
| DIFFICULTY | NORMAL |
| ATTRACT SOUND | ON |
| COIN | 2 COINS |
| CREDIT | 1 CREDIT |
| CONTINUE | 1 COIN CONTINUE |
| Sound settings | |
| Items | Setting details |
| MASTER VOLUME | 70 |
| SE VOLUME | 80 |
| BGM VOLUME | 70 |
| The adjustment (position of each game control) will be reset. | |
| The date and time will be reset. | |

- 1 Start the test mode.
(Method for starting the test mode: Page 50)
- 2 Select the "FACTORY SETTING" item on the menu using the flap change button. Then press the start button.



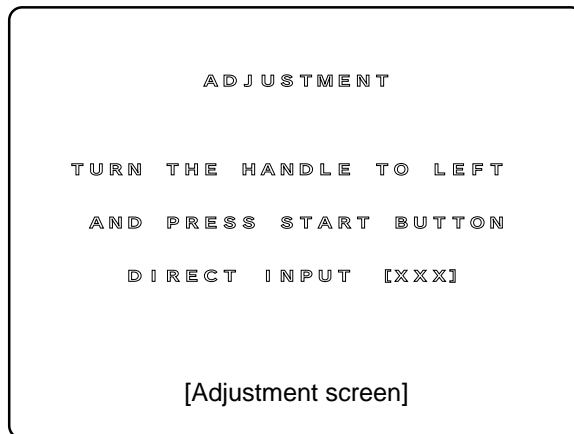
- 3 The screen will change to the confirmation screen asking whether or not to execute the factory setting function. Select "YES" or "NO" following the screen instructions.



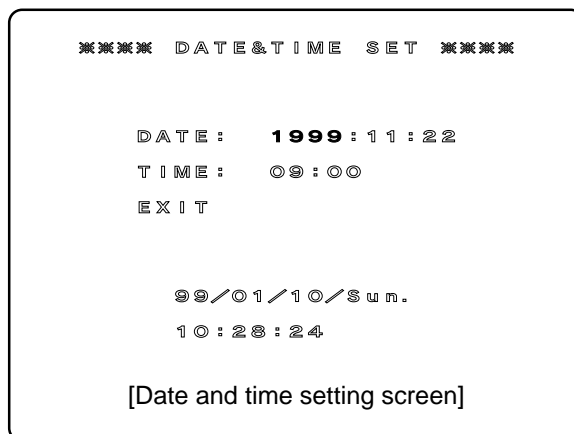
- Execute: Select "YES" by using the flap change button. Then press the start button.
- Do not execute: Select "NO" by using the flap change button. Then press the start button.

- 4 After "YES" is selected and the start button is pressed, the game configuration will be returned to the settings the machine had when it was delivered. Since all of the other saved data will also be initialized, the adjustment and the date and time setting screens will be displayed automatically. Be sure to perform all of the adjustments and settings, following the screen instructions. It will take a few seconds to erase the data.

(Adjustments: Page 69 / Date and time setting: Page 79)



- After the adjustments are complete, the screen will return to the date and time setting screen. Reset the date and time.



- After the date and time are set, the screen will return to the menu.

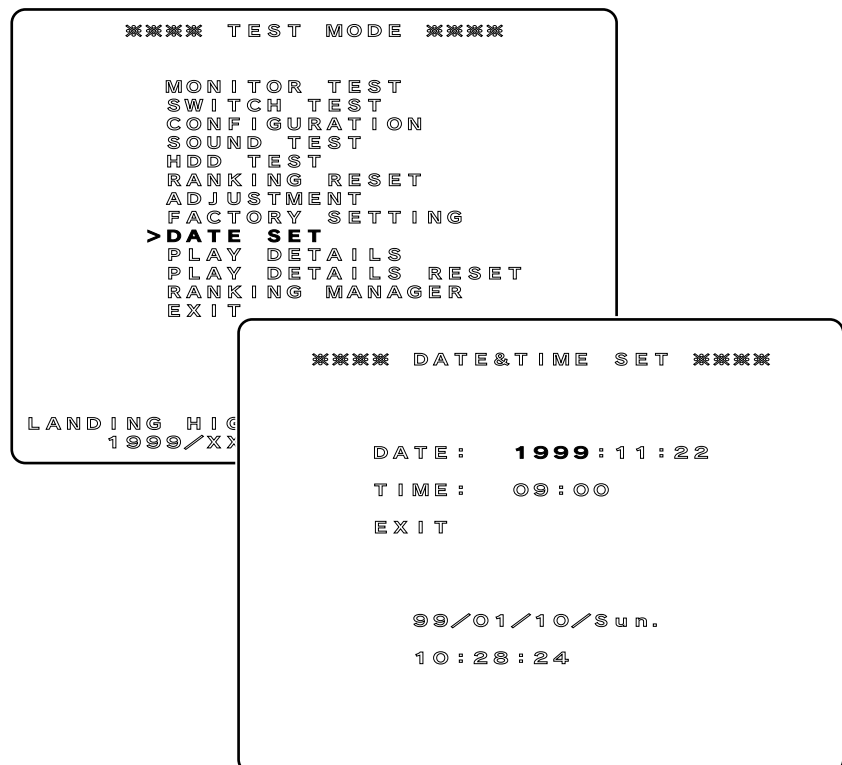
- 5 If "NO" is selected, the screen will return to the menu without resetting any item. When you want to continue in the test mode, select another item on the menu screen.

(Quitting the test mode: Page 52)

4-13. Date and time setting

Set the date and time by selecting the "DATE SET" item.

- 1** Start the test mode.
(Method for starting the test mode: Page 50)
- 2** Select the "DATE SET" item on the menu using the flap change button. Then press the start button.

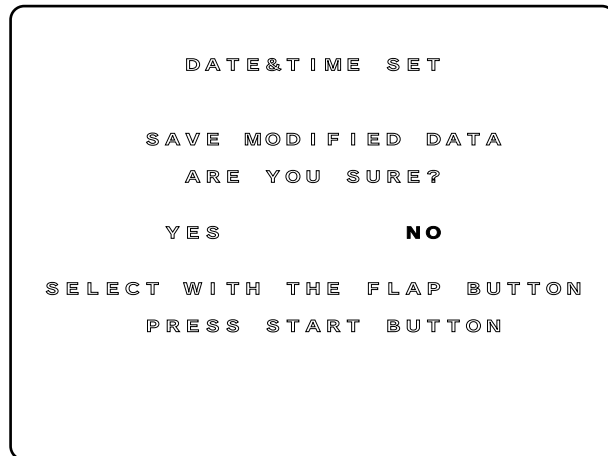


To set the date and time

Select the item you want to change (year, month, date, hour, or minute) using the flap change button. The value for the selected item can be changed by pressing the help or cockpit display change button.

- 3** After the values are correct, select the "EXIT" item using the flap change button. Then press the start button.
(The date and time shown on the bottom of the screen are the settings before being changed.)

- 4 The screen will change to a screen asking you to confirm the settings you just made. Select "YES" or "NO" following the screen instructions.



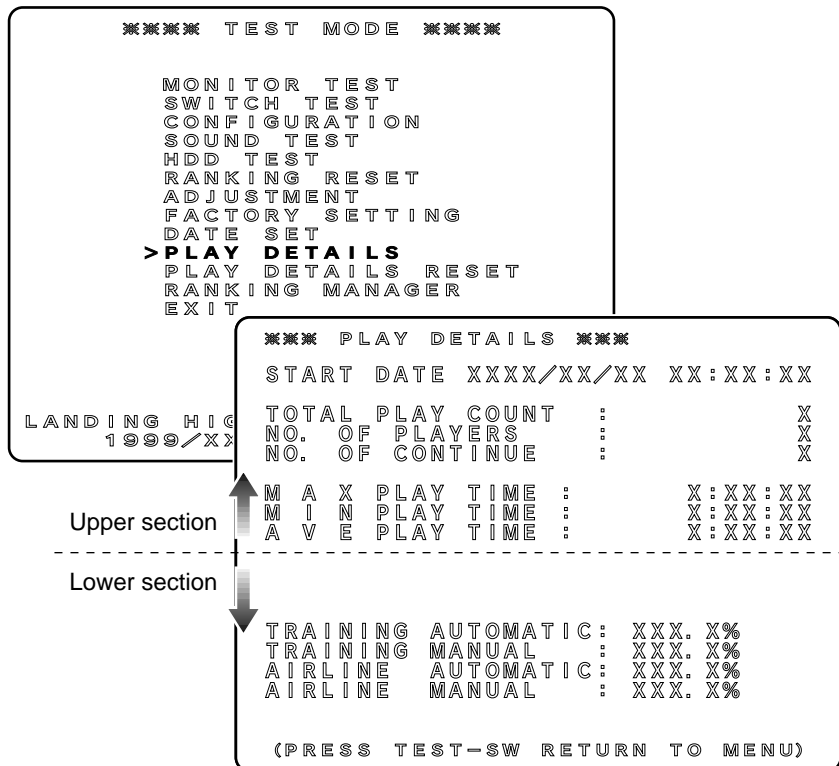
- Save: Select "YES" by using the flap change button. Then press the start button.
- Do not save: Select "NO" by using the flap change button. Then press the start button.

- 5 When "YES" is selected, and the start button is pressed, the settings you made are saved. Then the screen will return to the menu. (When "NO" is selected, and the start button is pressed, the settings you made are not saved. Then the screen will return to the menu.)
- 6 Quit the test mode. When you want to continue in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-14. Play details

Select the “PLAY DETAILS” item to display historical data such as the number of plays, playing time, and the play ratio in each mode.

- 1** Start the test mode.
(Method for starting the test mode: Page 50)
- 2** Select the “PLAY DETAILS” item on the menu using the flap change button. Then press the start button.



Upper section: Displays the histories such as the total number of plays and playing time

| Items | Display details |
|------------------|--|
| START DATE | Date and time when the game is first played. |
| TOTAL PLAY COUNT | The total number of plays. |
| NO. OF PLAYERS | The total number of plays so far. |
| NO. OF CONTINUE | The total number of continue plays so far. |
| MAX PLAY TIME | Longest playing time. |
| MIN PLAY TIME | Shortest playing time. |
| AVE PLAY TIME | Average playing time. |

Lower section: Displays the histories of game contents

| Items | Display details |
|--------------------|--|
| TRAINING AUTOMATIC | The number of plays of the "Training flight: Automatic" mode, and its ratio in the total number of plays. |
| TRAINING MANUAL | The number of plays of the "Training flight: Manual" mode, and its ratio in the total number of plays. |
| AIR LINE AUTOMATIC | The number of plays of the "Air line flights: Automatic" mode, and its ratio in the total number of plays. |
| AIR LINE MANUAL | The number of plays of the "Air line flights: Manual" mode, and its ratio in the total number of plays. |

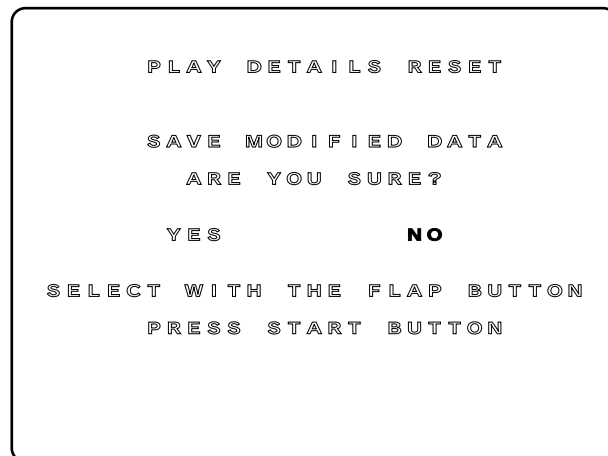
3 Press the test switch. The display will return to the menu screen.

4 Quit the test mode. When you want to continue in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-15. Initializing the play details

Select the "PLAY DETAILS RESET" item to erase the stored play detail data.

- 1** Start the test mode.
(Method for starting the test mode: Page 50)
- 2** Select the "PLAY DETAILS RESET" item on the menu using the flap change button. Then press the start button.
- 3** The screen will change to a confirmation screen before executing the PLAY DETAILS RESET. Select "YES" or "NO," following the screen instructions.



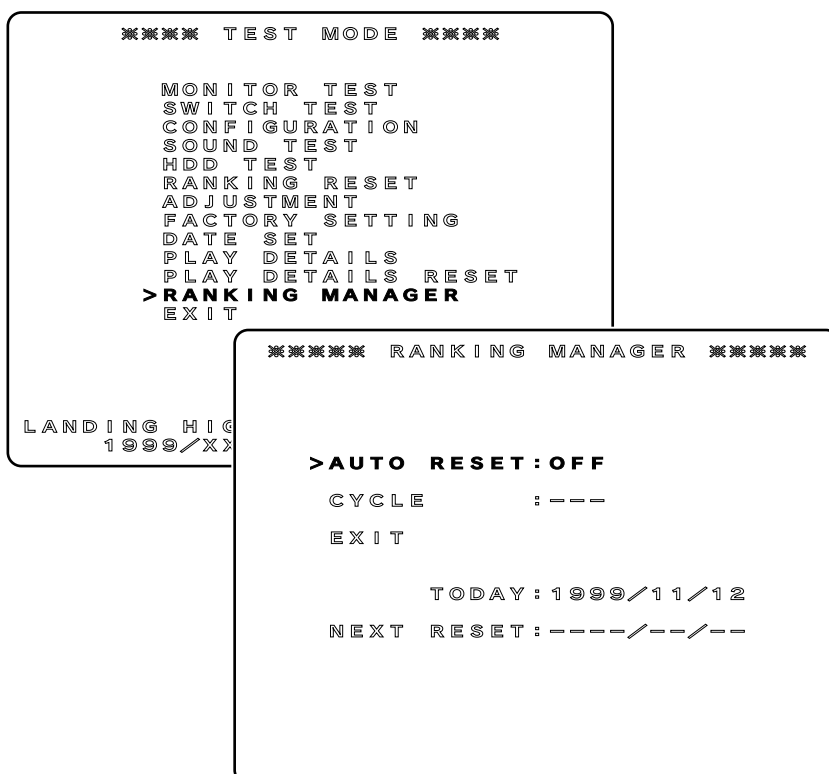
- Execute: Select "YES" by using the flap change button. Then press the start button.
- Do not execute: Select "NO" by using the flap change button. Then press the start button.

- 4** When "YES" is selected, and the start button is pressed, the PLAY DETAILS data will be reset. Then the screen will return to the menu. It will take a few seconds to erase the data. (When "NO" is selected, and the start button is pressed, the data will not be reset. The screen will return to the menu.)
- 5** Quit the test mode. When you want to continue the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

4-16. Ranking manager

Select the "RANKING MANAGER" item to set the period for keeping the ranking data records.

- 1 Start the test mode.
(Method for starting the test mode: Page 50)
- 2 Select the "RANKING MANAGER" item on the menu using the flap change button, and press the start button.



Operation method

Select an item using the flap change button. The contents of the setting can be changed by pressing the help or cockpit display change button.

AUTO RESET

The default setting for AUTO RESET is "OFF." If it is changed to "ON," the ranking data will automatically be reset at the specified interval.

CYCLE

You can set the reset interval from 1 to 365 days. If the AUTO RESET parameter is "OFF," this column will only show a dashed line, and the AUTO RESET is disabled.

When the AUTO RESET parameter is "ON," the screen shown on the next page will appear.

```

RANKING MANAGER

AUTO RESET: ON
>CYCLE      : 10 DAY(S)
EXIT

TODAY: 1999/11/12
NEXT RESET: 1999/11/22

```

- 3 After setting the “CYCLE” item, the system will display the day when the ranking data will be initialized next, on the “NEXT RESET” column. When updating the “CYCLE” item, the system will display the date that is calculated from “TODAY “ and “CYCLE,” on the “NEXT RESET” column.
- 4 After you complete specifying the settings, select the “EXIT” item using the flap change button. Then press the start button.
- 5 The screen will change to a confirmation screen asking you to confirm the settings you have changed. Select “YES” or “NO,” following the screen instructions.

```

RANKING MANAGER

SAVE MODIFIED DATA
ARE YOU SURE?

YES          NO

SELECT WITH THE FLAP BUTTON
PRESS START BUTTON

```

- Save: Select “YES” by using the flap change button. Then press the start button.
- Do not save: Select “NO” by using the flap change button. Then press the start button.

- 6** When “YES” is selected, and the start button is pressed, the settings you made are saved. Then the screen will return to the menu. (When “NO” is selected, and the start button is pressed, the settings you made are not saved. Then the screen will return to the menu.)

- 7** Quit the test mode. When you want to continue in the test mode, select another item on the menu.
(Quitting the test mode: Page 52)

Chapter 5 Adjustment/Tuning

5-1. Adjustments

The adjustments should only be made by shop maintenance personnel or engineers.

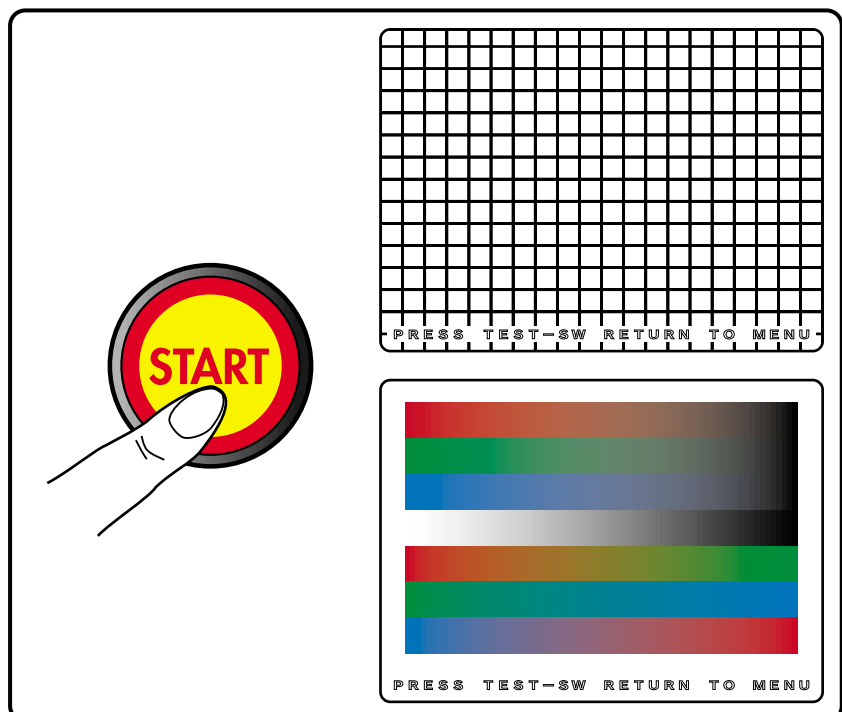
Important!

- The adjustments should only be made by shop maintenance personnel or engineers.

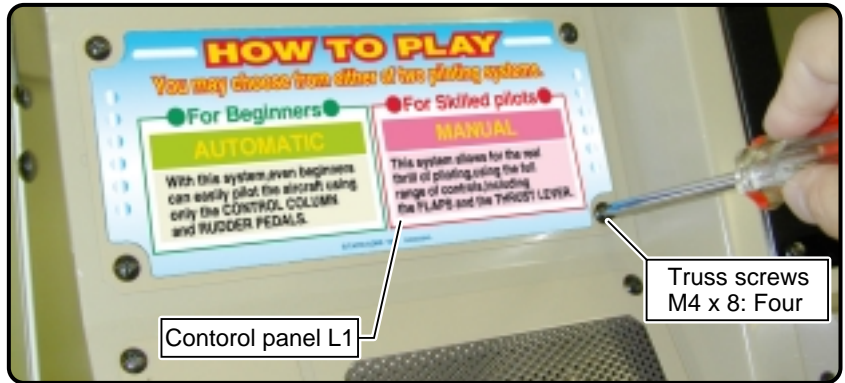
5-2. Adjustment of the monitor screen

Select the "MONITOR TEST" item on the test menu. Adjust the monitor using the adjusting knobs while looking at the screen.

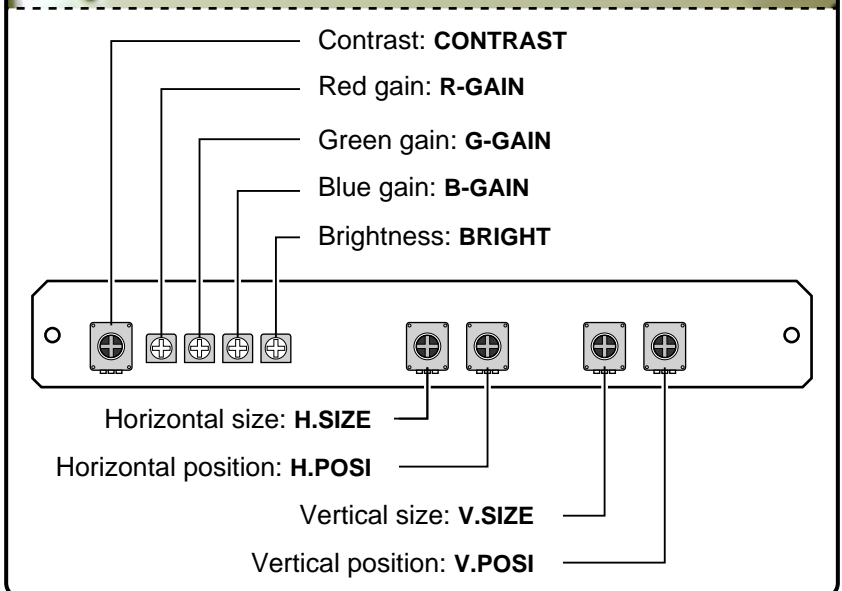
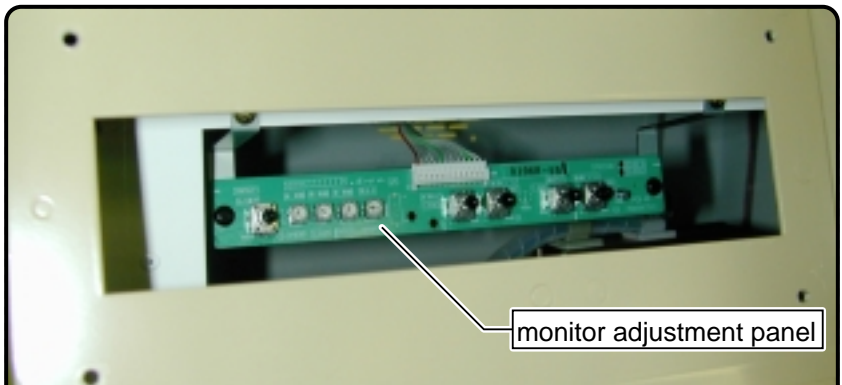
- 1** Open the coin rejection door using the supplied service key. Then, start the test mode. (Method for starting the test mode: Page 50)
- 2** Select the "MONITOR TEST" item on the test menu. Then, press the start button.
- 3** A crosshatch pattern will appear on the screen. Each time you press the start button, the screen will change between color bars and the cross-hatch pattern.



- 4** Remove the control panel L1 on the left of the liquid crystal display monitor by unscrewing the four screws.



- 5** After removing the control panel L1, you will find the monitor adjustment panel inside. Adjust the image size while looking at the crosshatch on the screen and adjust the color while looking at the color bar on the screen.



CONTRAST (adjusting light and darkness)

Adjusts the degree of light and darkness in the image.

R. G. B.-GAIN

R.-GAIN: Adjusts the red intensity.

G.-GAIN: Adjusts the green intensity.

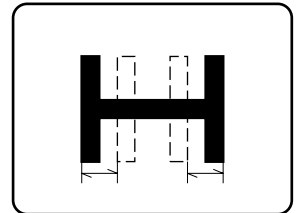
B.-GAIN: Adjusts the blue intensity.

BRIGHT (adjusting the brightness)

Adjusts the brightness of the whole image.

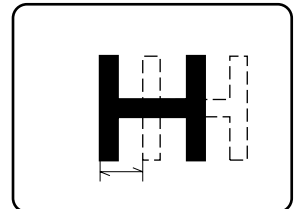
H. SIZE (adjusting the horizontal size)

Adjusts the horizontal screen size.



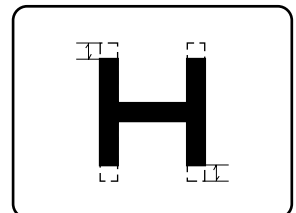
H. POSI (adjusting the horizontal display position)

Move the image left or right to the desired position.



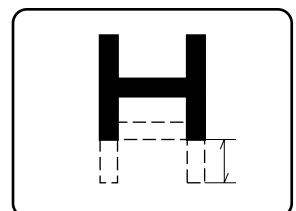
V. SIZE (adjusting the vertical size)

Adjusts the vertical screen size.



V. POSI (adjusting the vertical display position)

Move the image up or down to the desired position.

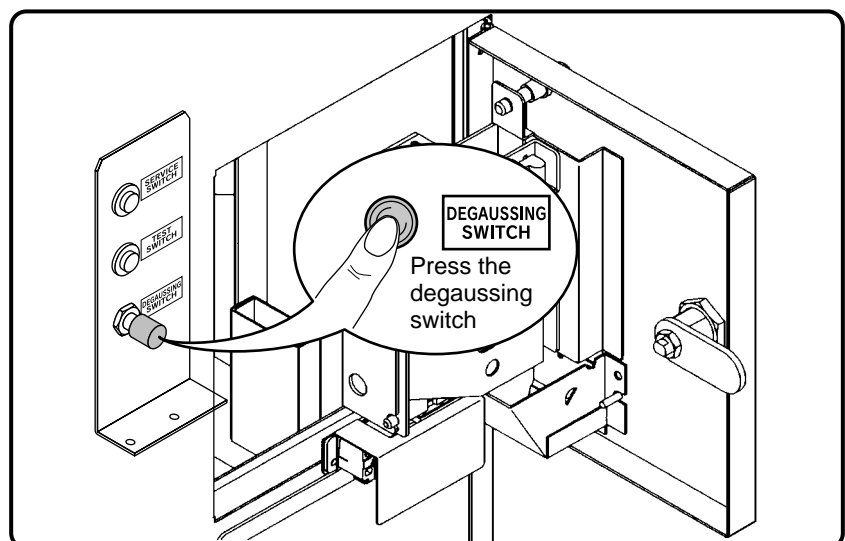


5-3. Eliminating color inconsistencies on the monitor screen

Eliminate color inconsistencies on the monitor using the degaussing switch.



- 1** Turn ON the power switch.
- 2** Open the coin rejection door using the supplied service key.
- 3** Press the degaussing switch on the central control panel. Color inconsistencies are corrected. After you press the degaussing switch, wait for at least 10 minutes before pressing it again.



Important!

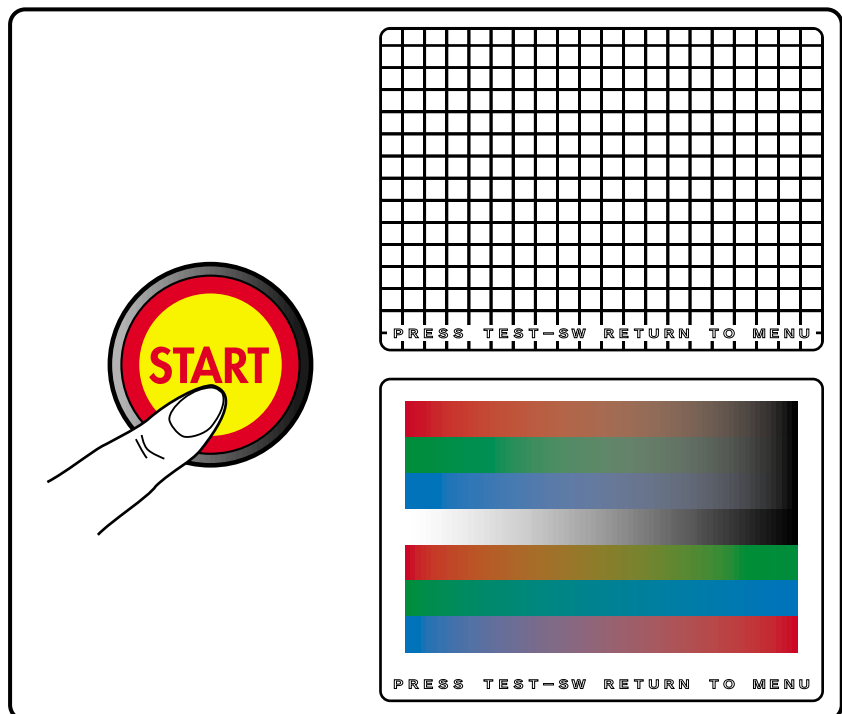
- After you press the degaussing switch, wait for at least 10 minutes before pressing it again.

5-4. Adjust the brightness of the liquid crystal display monitor

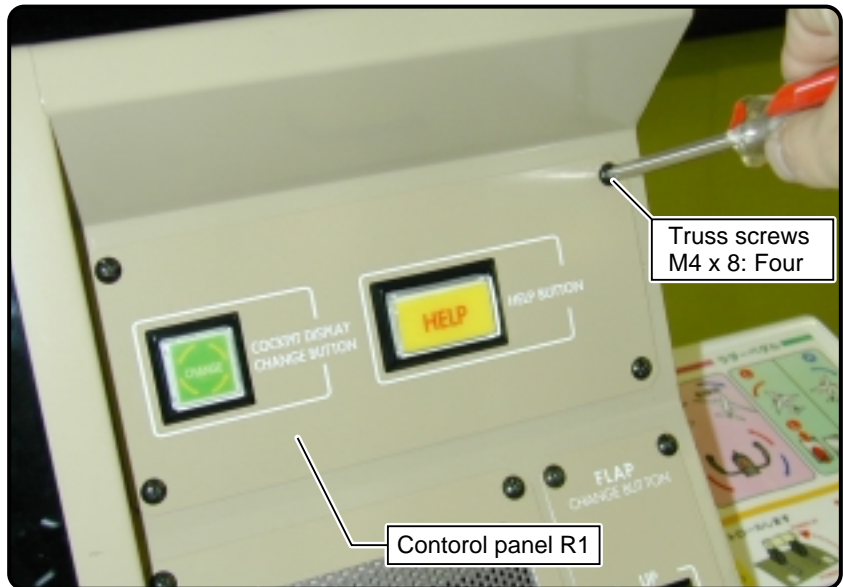
The liquid crystal monitor can be adjusted only in brightness.

Start the test mode, and adjust by turning the inside adjustment knob while looking at the color bar screen in the "MONITOR TEST." If the monitor is excessively bright, stripes may appear. When stripes are too obvious, adjust the brightness a little darker.

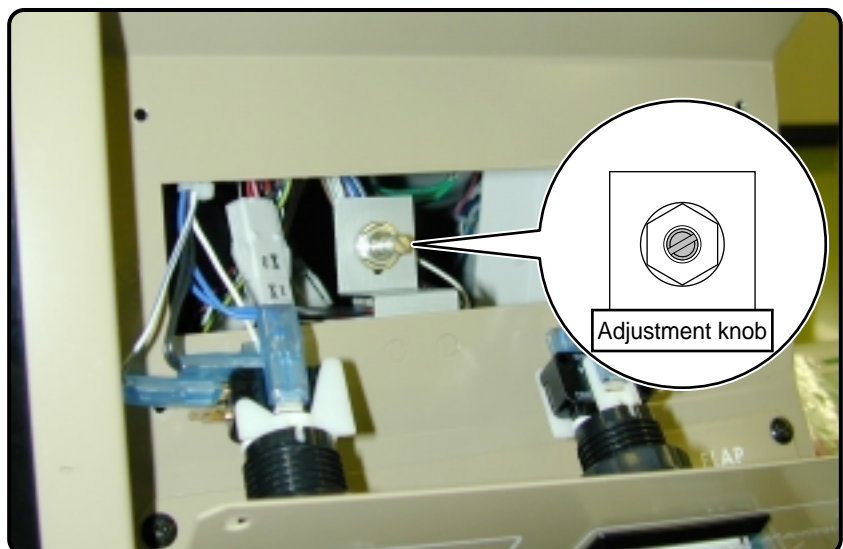
- 1** Open the coin rejection door using the supplied service key. Then, start the test mode. (Method for starting the test mode: Page 50)
- 2** Select the "MONITOR TEST" item on the test menu. Then, press the start button.
- 3** A crosshatch will appear on the screen. Press the start button again and change to the color bar display.



- 4** Remove the control panel R1 on the right side of the liquid crystal display monitor by unscrewing the four screws.



- 5** After removing the control panel R1, you will find the adjustment knob inside. Adjust the brightness while looking at the color bar screen. When you turn the knob to the right, the screen will be brighter, and when you turn the knob to the left, the screen will be darker.



Important!

- If the liquid crystal display monitor is excessively bright, stripes may appear. When stripes are too obvious, adjust the brightness a little darker.

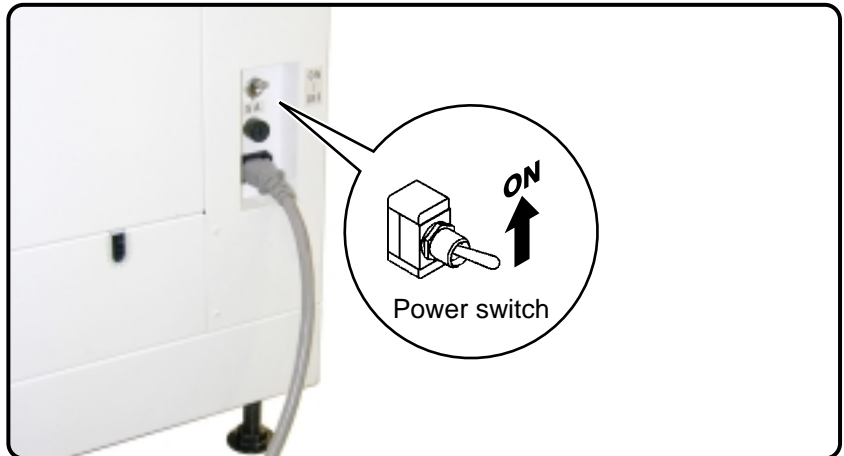
5-5. Voltage adjustment

⚠ CAUTION

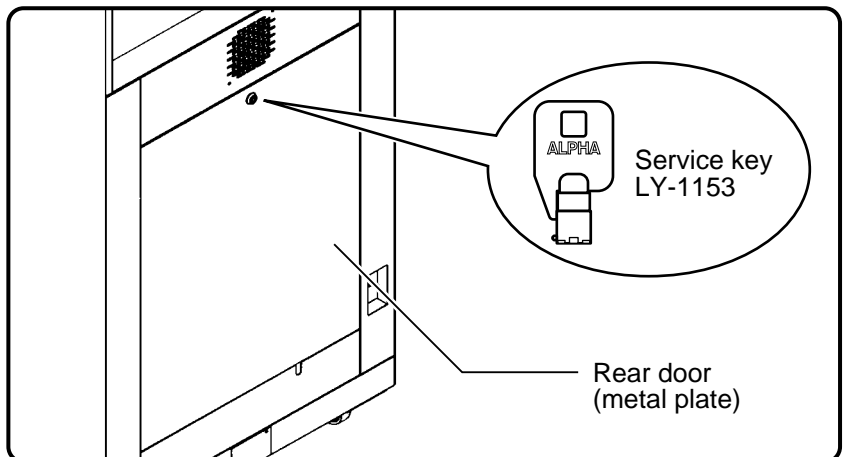
Do not set the output voltage of the switching regulator higher than the specified voltage. Setting output voltage too high may damage the ICs on the PC board.

Setting output voltage too high may damage the ICs on the PC board.

- 1** Turn ON the power switch.

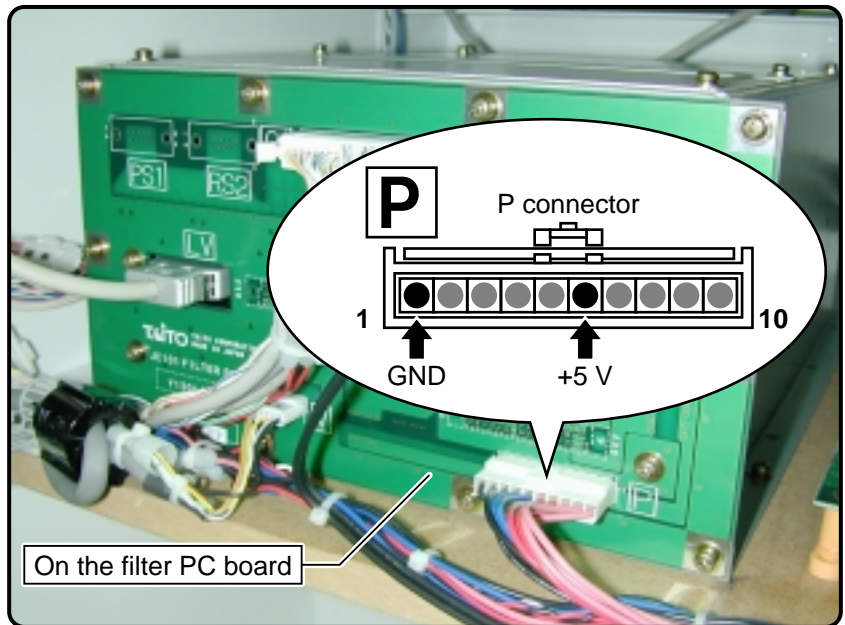


- 2** Open the rear door using the supplied service key.

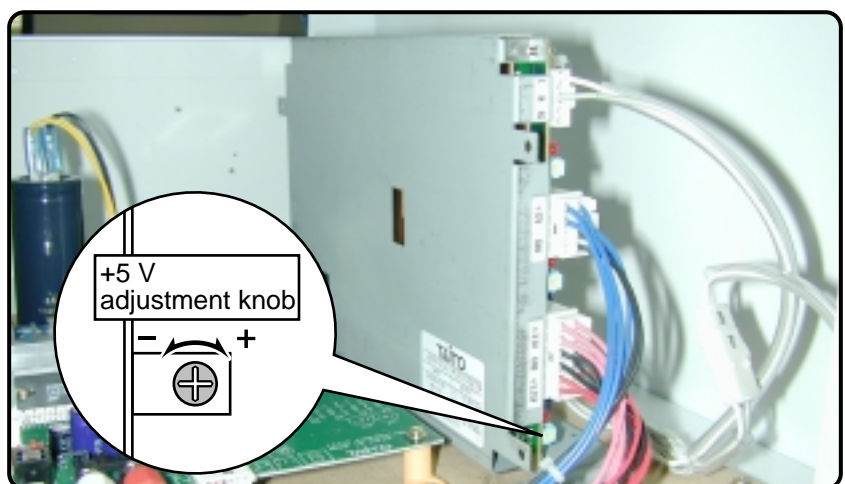


How to adjust the +5 VDC supply

- 1 Measure between the "GND" terminal (number 1 pin) and "+5 V" terminal (number 6 pin) on the filter PC board P connector. See the illustration below to find these terminal positions on the connector.



- 2 Adjust the voltage using the +5 V adjustment knob on the switching regulator. Make sure to set the voltage to exactly +5.25 V.

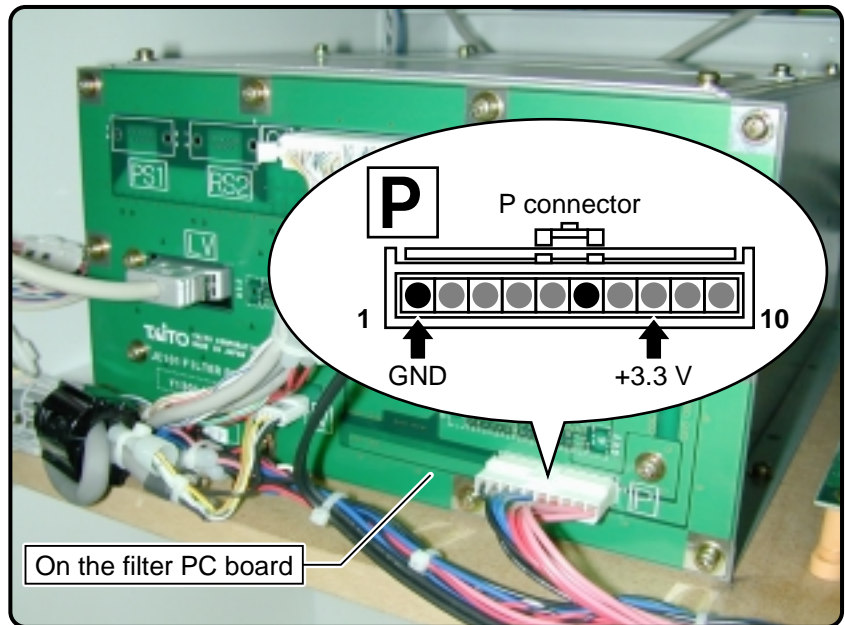


Important!

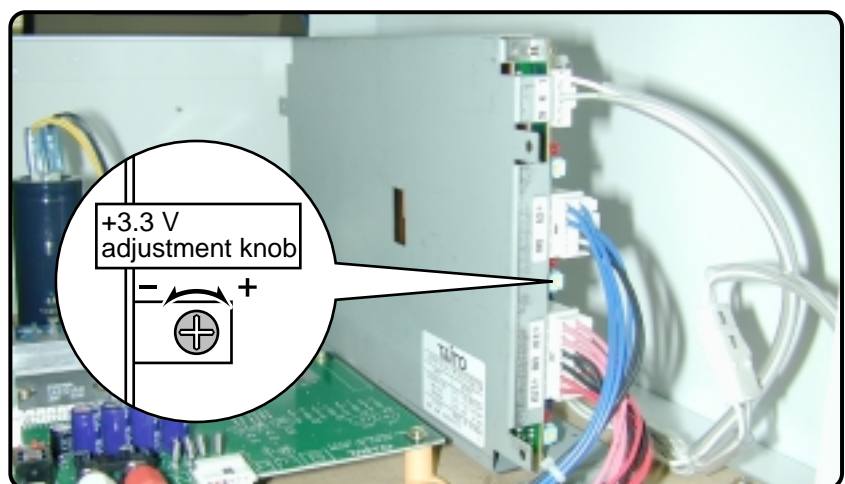
- Make sure to adjust the switching regulator voltage to exactly +5.25 V.

How to adjust the +3.3 VDC supply

- 1 Measure between the "GND" terminal (number 1 pin) and "+3.3 V" terminal (number 8 pin) on the filter PC board P connector. See the illustration below to find these terminal positions on the connector.



- 2 Adjust the voltage using the +3.3 V adjustment knob on the switching regulator. Make sure to set the voltage to exactly +3.3 V.



Important!

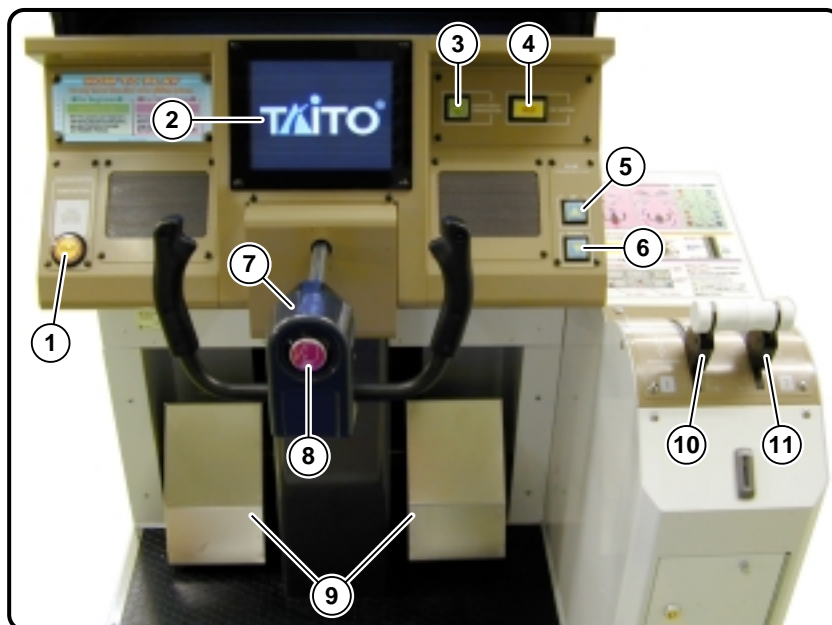
- Make sure to adjust the switching regulator voltage to exactly +3.3 V.

Chapter 6 Game contents

6-1. Game outline

"Landing High Japan" is a jetliner flight simulation game. There are two modes: "Beginner course: Training flight" in which you will fly with operation guidance, and "Advanced course: Airline flight" in which you can freely select an airport and operate the craft.

6-2. Names and functions of each part



Start button

Press to start game. During play, press to change the viewpoint.
(View change: Page 101)

Cockpit display

When you are selecting a game, the display shows the information regarding the selection screen. During the game, the instruments panel will be displayed.

Cockpit display change button

Press this button to change the information display.
Each time you press the button during the game, the cockpit display will cyclically change to the "Attitude meter," "Output meter," and then "Map display." However, when you select the automatic flight mode, this button does not function because the meter display changes automatically.

Help button

Press this button to get back on course if you stray. You can only use it a fixed number of times, however.

Flap UP button

Press this button to move the flaps up.

Flap DOWN button

Press this button to move the flaps down.

Control column

Pushing the control column forward lowers the nose of the airplane, and pulling the control column back raises the nose of the airplane until it stalls. Turn the handle on the control column to the left; the airplane will bank and turn to the left. Turn the handle on the control column to the right; the airplane will bank and turn to the right.

Speak button

Press this button to raise and lower the landing gear, as well as to communicate with the co-pilot.

Rudder pedal

You can change the direction of the nose of the airplane. (This operation is different from rolling turns that can be performed using the handle of the control stick.)

To direct the nose of the airplane to the left, step on the left rudder pedal.

To direct the nose of the airplane to the right, step on the right rudder pedal.

Left thrust lever

Control the output of the left wing engine.

Right thrust lever

Control the output of the right wing engine.

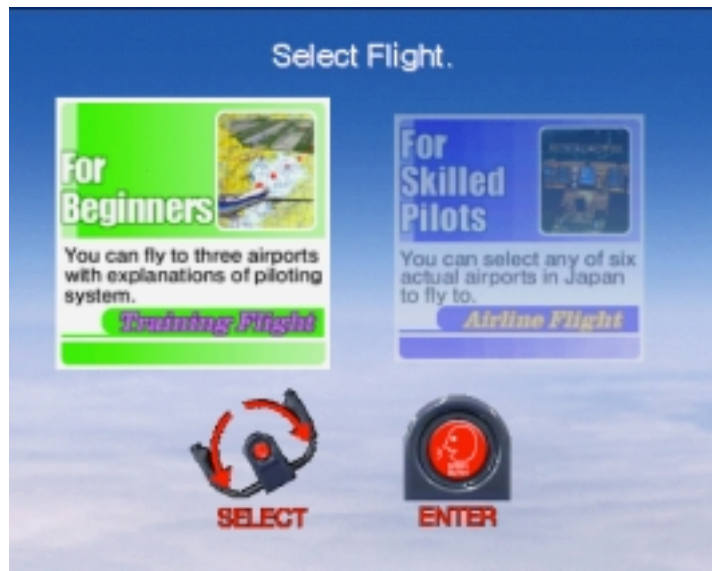
When the left and right thrust levers are in the zero position, the air brake (rapid deceleration) will function during flight, and the reverse jet (braking) will function during landing.

6-3. Procedure for starting a game

- 1 Insert a coin (or coins) into the coin slot. The screen shown below will be displayed.



- 2 Press the start button, and the flight selection screen will appear and then you can select the game mode. Select the beginners' "Training flight" course or advanced "Airline flight" course by moving the control column, and press the speak button.



- 3 After selecting the game mode, the screen will change to the airplane type selection screen. Select the airplane type by moving the control column, and press the speak button.



- 4** After selecting the airplane type, the screen will change to the flight operation selection screen. Select the automatic or manual mode by moving the control column, and press the speak button.



- 5** After selecting the flight operation mode, select the departure airport. When you are in the training flight mode, you cannot select an airport, since your flight plan has been fixed. When you are in the airline flight mode, select the departure airport by moving the control column.



- 6** After displaying the round instructions, the game will start. First you take off from the ground on the first screen in both the training flight and airline flight (it is programmed so that you can definitely clear a takeoff). There are no takeoff operations from the second screens. Only the landing will be played.

6-4. Game rules

Beginners and advanced courses

In the "Beginners course: Training flight," the flight plan is fixed. There are 3 plans and 4 screens for each play. In the "Advanced course: Airline flight," the player can select a departure airport and landing airport. There are 6 plans and 7 screens for each game.

Flight plan

The flight plan is to decide departure and landing airports. From taking off from the ground until finishing landing will be counted as "One plan." Take off is included only in the first plan for both the beginner's and advanced courses. There is no takeoff from the second plans.

Clearing a round

Your operation skill will be evaluated during your flight and after taking off and landing. Takeoff on the first screen is programmed so that you can definitely clear it. From the second plan, you cannot go to the next screen unless you succeed in landing and get a higher number of points than the specified clear point.

Game over

The game will be over when any of the following cases occur.

COURSE OUT

If you deviate from the course, exceeding the specified level when running on the runway for taking off and landing, or during flight, the display shows "COURSE OUT" and the game will be over. However, the game will not end when taking off on the first screen. You can always try landing on the second screen.

GO AROUND

If you deviate from the course over the specified level above the airport and around, the display shows "GO AROUND" and the game will be over. However, the game will not end when taking off on the first screen. You can always try landing on the second screen.

CRASH

If any part of the body other than the wheel touches the ground or the airplane crashes due to excessive speed, the display shows "CRASH" and the game will be over. However, the game will not finish when taking off on the first screen. You can always try landing on the second screen.

OVER RUN

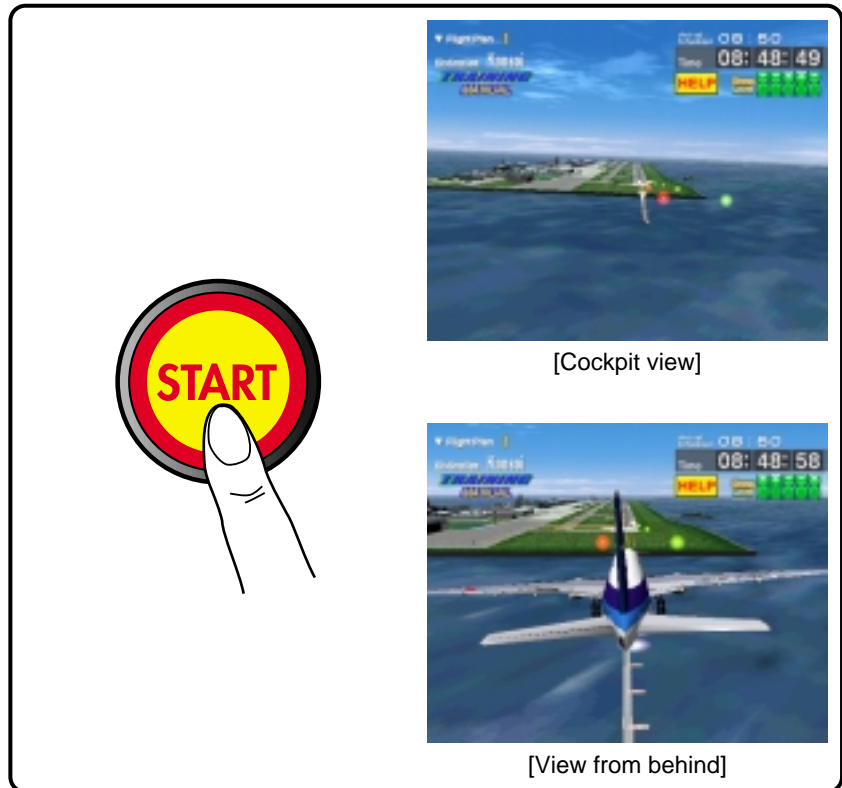
When you finish landing, you may go over the runway due to the improper touchdown point or excessive speed. In this case, although you made a landing, you could not clear the plan. The display shows "OVER RUN" and the game will be over.

BAD LANDING

Even though you complete a landing successfully, if you could not get a higher number of points than the specified clear point in the total evaluation, the display shows "BAD LANDING" and the game will be over. You cannot go to the next game. (For total points, see the next page, "6-6. Piloting evaluation.")

6-5. View change

Press the start button to switch between the two view points.



6-6. Piloting evaluation

Only when takeoff and landing are made successfully, will the flight technique of the player be evaluated. There are 3 items to be evaluated, "flight operation," "flight course," and "passenger's evaluation." The grand total of the three items will be the "total score."

| Check List | Demerit | Check List | Data | Demerit |
|---------------------------|-----------|-----------------------------|-----------|---------------|
| High-Speed Bank | 0 points | Angle of Approach | + 0 ° | 0 points |
| High-Speed Pitch | 0 points | Approach Velocity | + 1 kt | 0 points |
| Inclination Too Great | 0 points | Landing Orientation | | 0 points |
| Stall | 0 points | Touchdown Velocity | + 1 kt | 0 points |
| Excessive Speed | 0 points | Touchdown Length | 23 m | 0 points |
| Verification Ignored | -2 points | Touchdown Point Width | + 0 m | 0 points |
| No Landing Gear Operation | -2 points | Hard Landing | | -4 points |
| Bonus Points | | Piloting Evaluation | 52 | points |
| | | Course Evaluation | 34 | points |
| | | Passenger Evaluation | -2 | points |
| | | Overall Evaluation | 84 | points |

6-7. Continue game

You can restart the game from the beginning of the round in which you failed to make a landing.

6-8. Entering your initials

If your total number of points is one of the best ten of the machine, you can enter your initials (up to three letters) when the game is over. Move the handle of the control column to the left and right to select the letters and press the speak button to determine the selection. To erase the letter you selected, press the help button.



Chapter 7 Maintenance

7-1. Important maintenance points

⚠ CAUTION

Only qualified arcade maintenance personnel or engineers should perform the maintenance described in this manual. Do not attempt to make any repairs or perform any maintenance not described in this manual.

⚠ CAUTION

If any damaged or broken parts are found, turn OFF the power supply and contact us. Operating the game machine with damage or known problems may result in even more damage or personal injury.

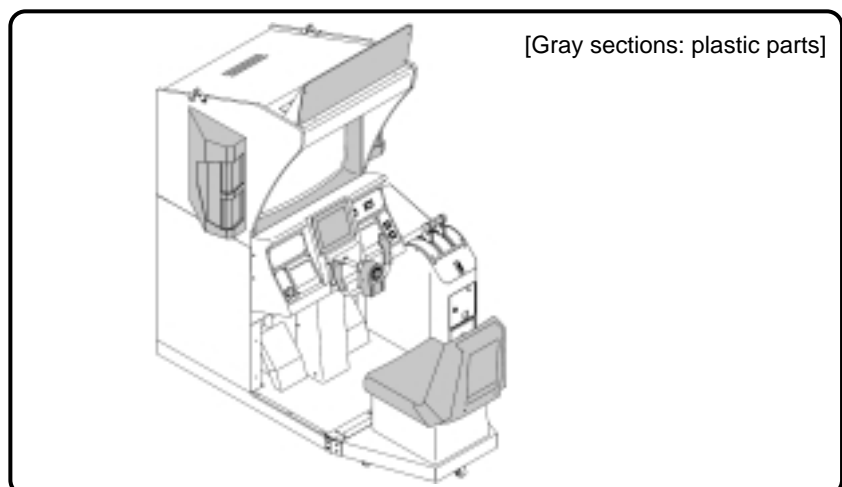
⚠ CAUTION

Use of parts other than genuine TAITO parts in the maintenance of the machine will be regarded as unauthorized modification. Never modify the machine.

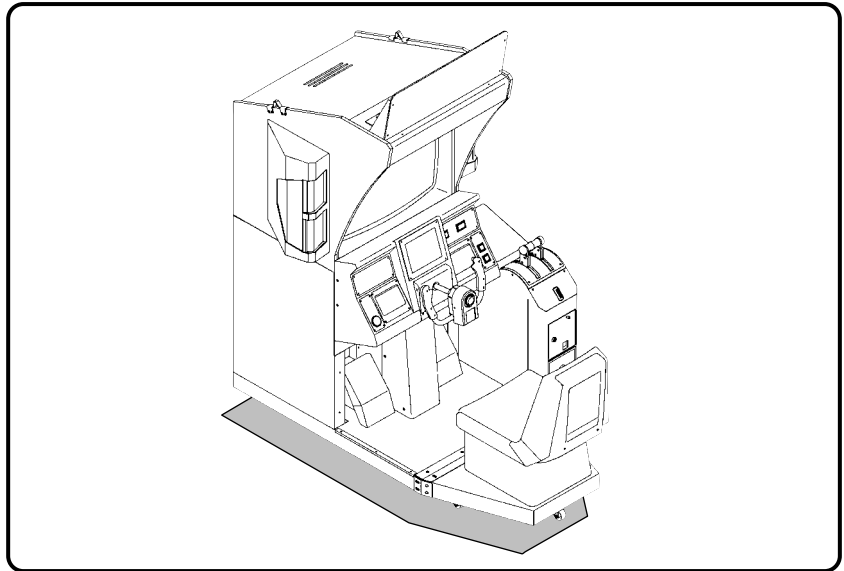
7-2. Items to check before starting operation

The following items must be checked every day before starting business. Be especially careful to check the parts that players touch.

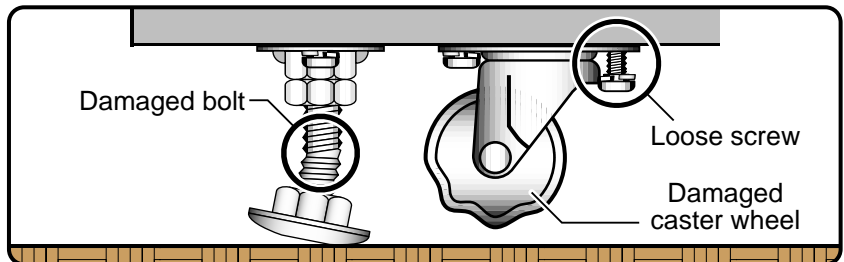
Make sure that there is no damage on the exterior of the housing (plastic parts and wooden parts.)



Make sure that loose feet have not allowed the machine to move from its original position.

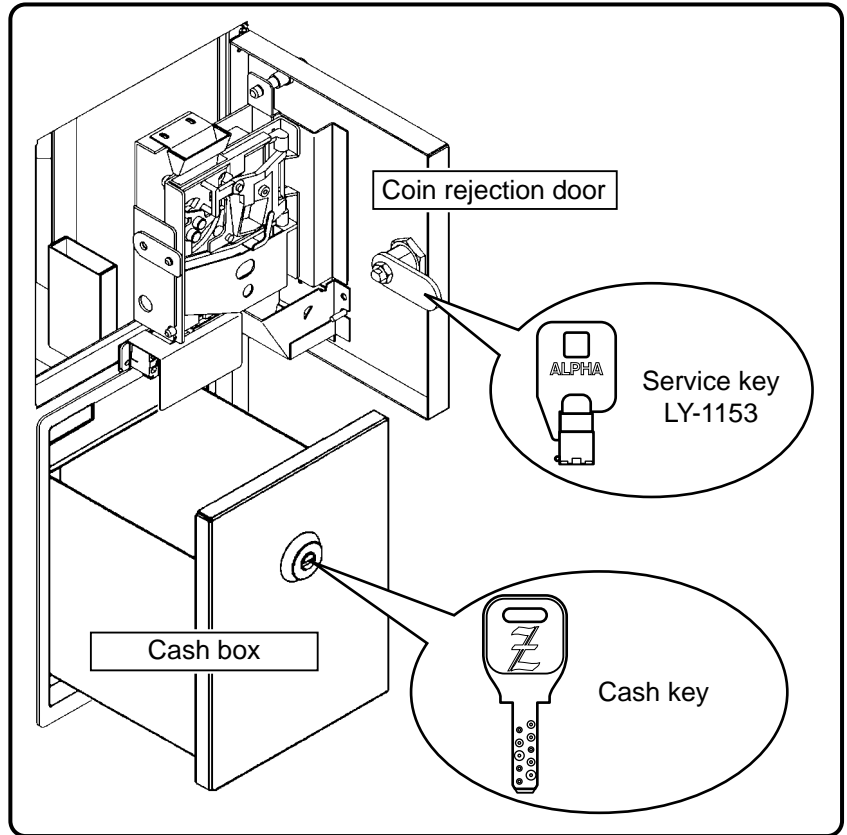


Make sure that the casters and adjustable feet are not damaged or loose.

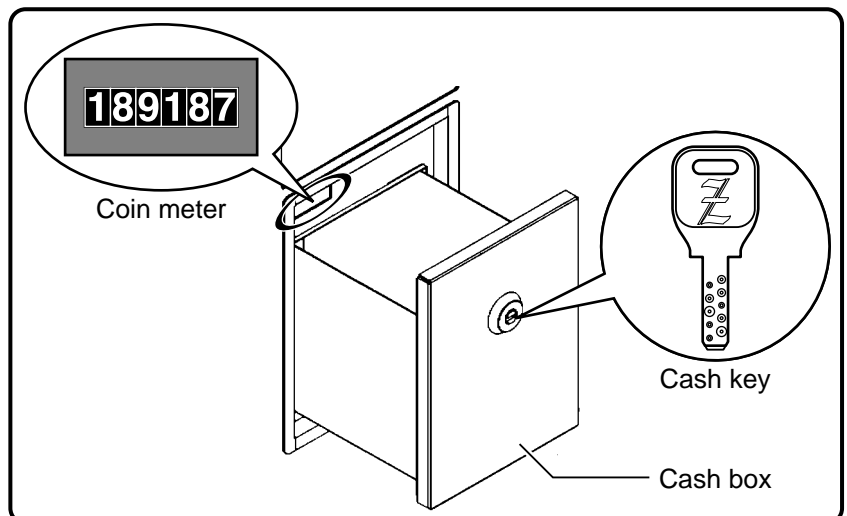


Make sure that there are no cuts or thin areas in the power cord.

Make sure that the door can be opened or locked using the accessory keys.



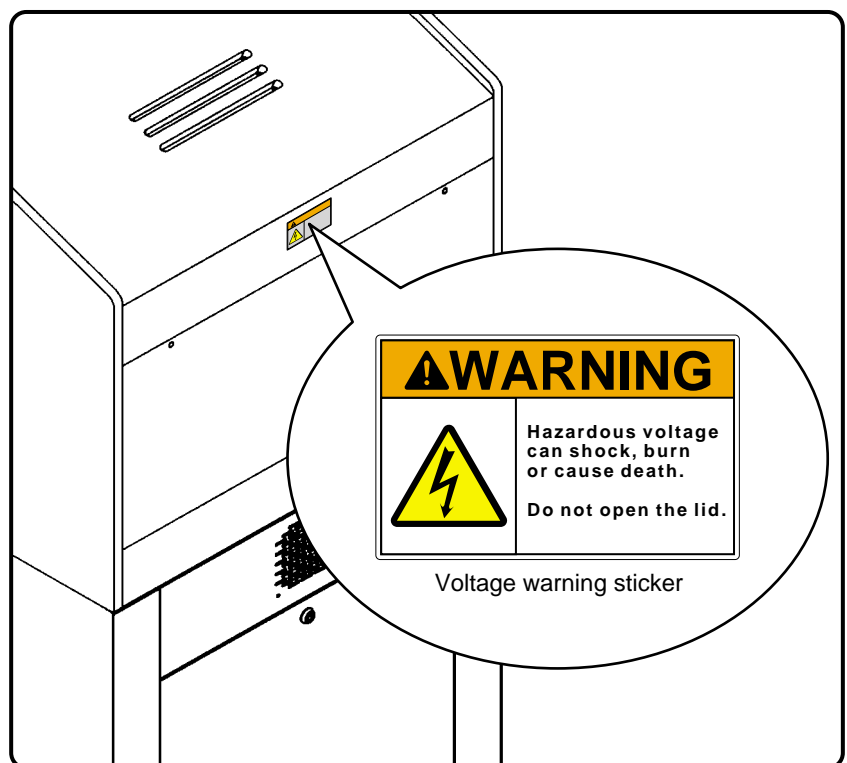
Make sure that the coin meter functions properly.
Pull out the cash box. You will find a meter in the cash box.



Operation check (checking that the game can be played properly)

For details about how to check the game's operation, see "Chapter 3: Operation check," on page 39. If you find a problem with any of the operation devices, see the "Adjustment" section in Chapter 4 "Setting," on page 69.

Make sure that the voltage warning sticker has not come off and is still readable.



Solving problems

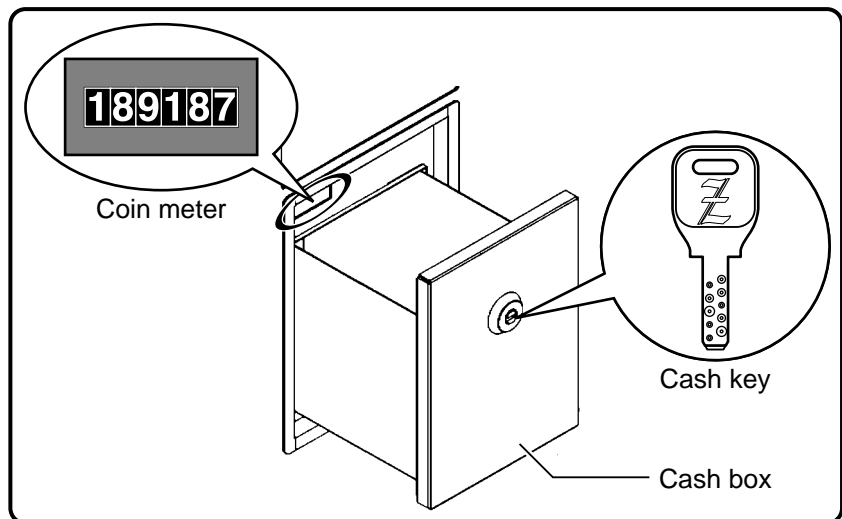
If you find a problem with any of the items above, please contact your dealer.

7-3. Check at the end of each day

At the end of the day, check the items described in section 7-2, "Items to check before starting operation."

7-4. How to collect the coins

- 1 Unlock and pull out the cash box using the cash key.
Collect the coins in the cash box.



7-5. Cleaning

- Normally, you only need to use a dry soft cloth to wipe off the machine.
- If the dirt is stubborn, use a solution made by diluting neutral detergent with water. Soak a cloth in this solution, wring it tight, and wipe off the dirt. Then wipe the machine again with a dry cloth.

Important!

- Do not use paint thinner or benzine to clean the machine housing (wood) or side cover (plastic parts).

7-7. Parts replacement

Replace the fluorescent lamp or other lamps, hard disk, fuses, or safety stickers.

CAUTION

Make sure to turn OFF the power switch on the housing before replacing any part.

CAUTION

Make sure to turn OFF the power switch before replacing the fluorescent lamp or any other lamps. Leave the machine OFF for at least three minutes to allow the lamp cool down. If you touch the lamp before it has cooled, you may be burned.

CAUTION

Before removing the smoke panel, make sure to lower all of the adjustable feet and secure the machine so that it cannot move.

CAUTION

Before removing the title panel, make sure to lower all of the adjustable feet and secure the machine so that it cannot move.

CAUTION

Be careful when removing the title panel because you have to work at height.

CAUTION

Be careful when handling the hard disk, since it is easily damaged.

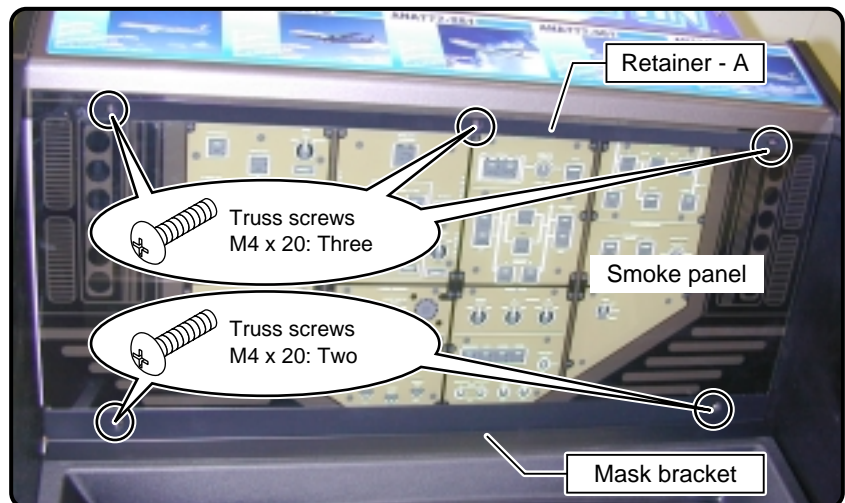
CAUTION

Be careful not to scratch or slice yourself on the edges of the metal plates when working on the game machine.

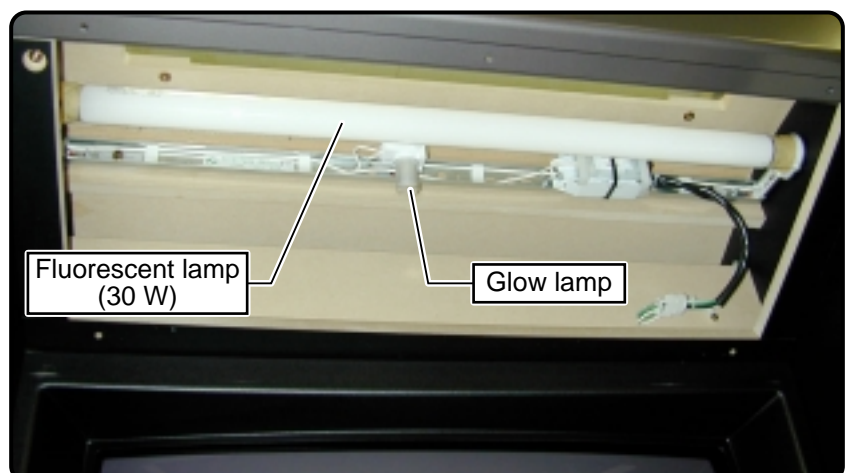
Replacing the fluorescent lamp

Replace the fluorescent lamp in the title assembly. Before replacing it, secure all of the adjustable feet, so that the machine cannot move.

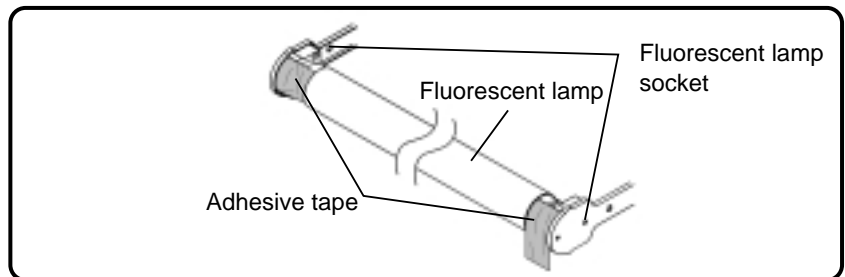
- 1** Turn OFF the power switch. Leave the machine OFF for at least three minutes to allow the lamp cool down. If you touch the lamp before it has cooled, you may be burned.
- 2** Remove the smoke panel on the front of the main housing.
 - Upper frame: Retainer A (sheet metal part), three screws
 - Lower frame: Mask bracket (sheet metal part), two screwsThe panel is secured using the parts above. Be careful not to drop the smoke-printed panel or sheet metal parts.



- 3** Remove the fluorescent lamp (30 W) or glow lamp.
Before removing the fluorescent lamp, peeling the adhesive tape off from both ends.



- 4 Install a new fluorescent lamp. Secure the fluorescent lamp and fluorescent lamp socket with adhesive tape in order to keep the fluorescent lamp from falling out.

**Fluorescent lamp part number**

Part name : Fluorescent lamp (Day light) 100 V 30 W
Part number: C1500058A

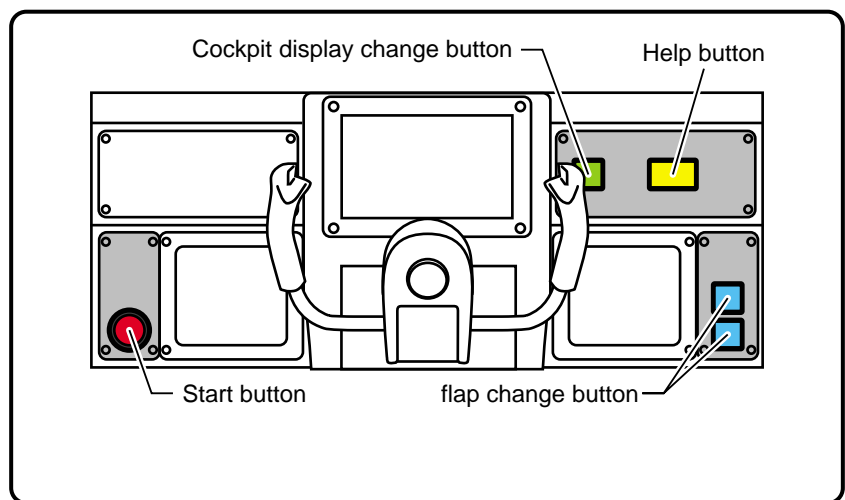
Glow lamp part number

Part name : Glow lamp FG-1P
Part number: C1400101A

- 5 When discarding used fluorescent lamps or glow lamps, follow the local regulations. We recommend completely covering the lamps with adhesive tape to prevent any broken glass from scattering.

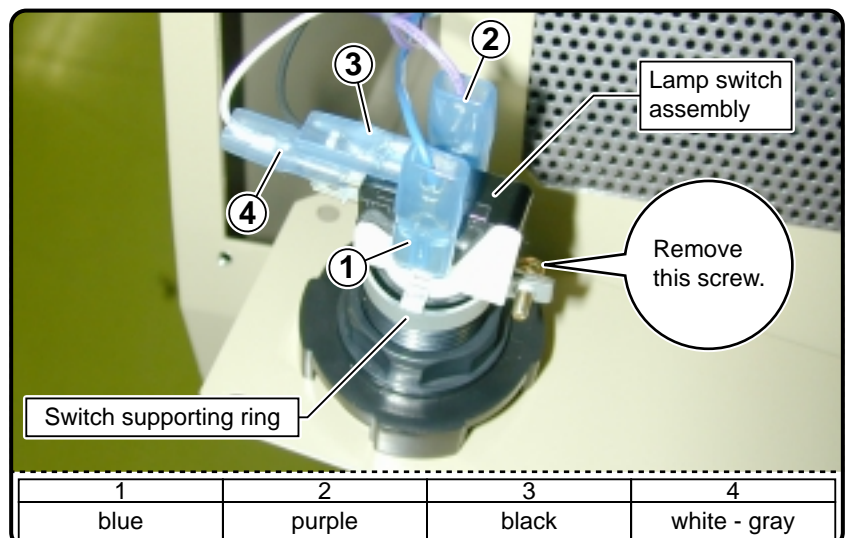
Replacing the lamp on the control box

- 1** Turn OFF the power switch. Leave the machine OFF for at least three minutes to allow the lamp cool down. If you touch the lamp before it has cooled, you may be burned.
- 2** Remove the panel where the lamp switch you want to replace is fixed. There is a switch section, where a lamp is integrated, on the rear side of the panel.



- 3** The lamp switch assembly is secured with the switch supporting ring. Remove the screw shown in the figure, and loosen the ring. Then, pull out the lamp switch assembly.

Rear side of the start button



Rear side of the help and cockpit display change buttons

Lamp switch assembly

Remove this screw.

Switch supporting ring

• Cockpit display change button

| 1 | 2 | 3 | 4 |
|------|-------|-------|--------------|
| blue | white | black | white - blue |

• Help button

| 1 | 2 | 3 | 4 |
|------|-------|-------|----------------|
| blue | brown | black | white - orange |

Rear side of the flap change buttons

Switch supporting ring

Remove this screw.

Remove this screw.

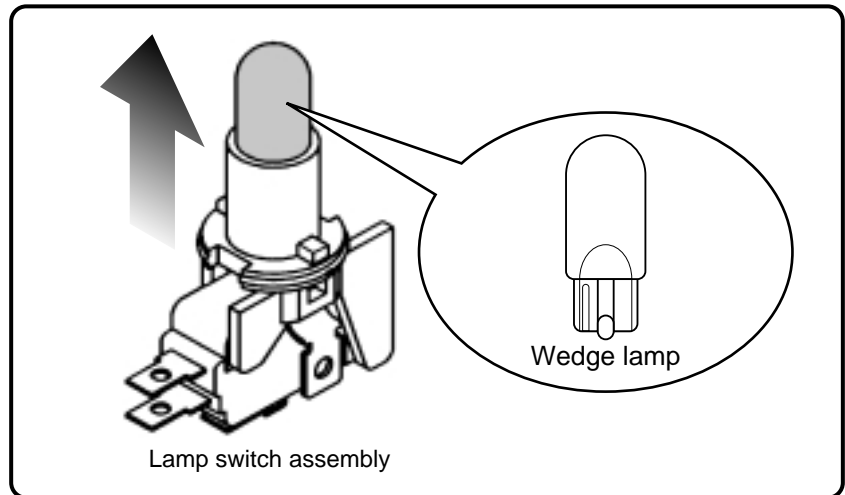
• Up button

| 1 | 2 | 3 | 4 |
|------|--------|-------|----------------|
| blue | orange | black | white - yellow |

• Down button

| 1 | 2 | 3 | 4 |
|------|------|-------|---------------|
| blue | gray | black | white - green |

- 4** Pull out the wedge lamp from the removed lamp switch assembly. Then replace the lamp.



Replacing the lamps

Part name : Wedge lamp 0.25 A 12V

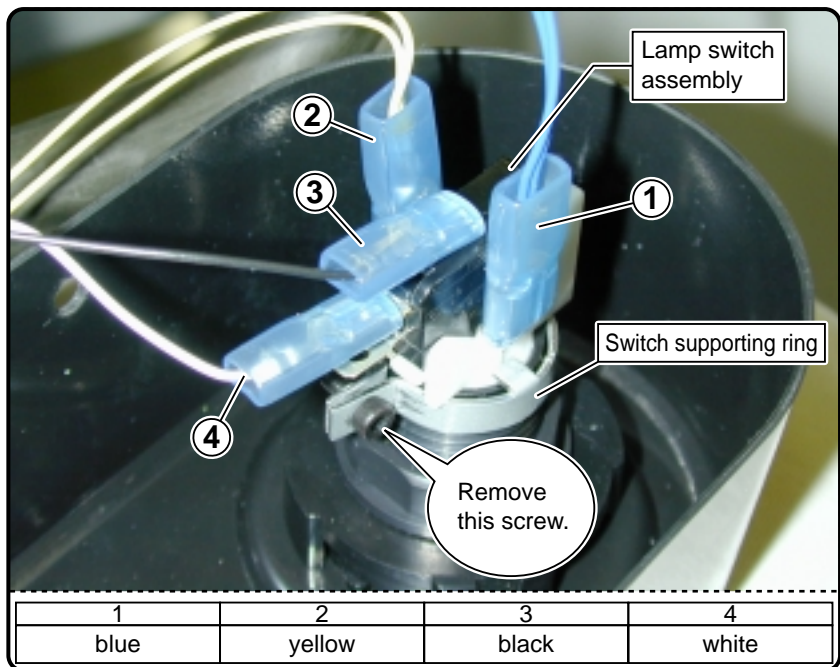
Part number : C1400023A

Replacing the lamp in the speak button

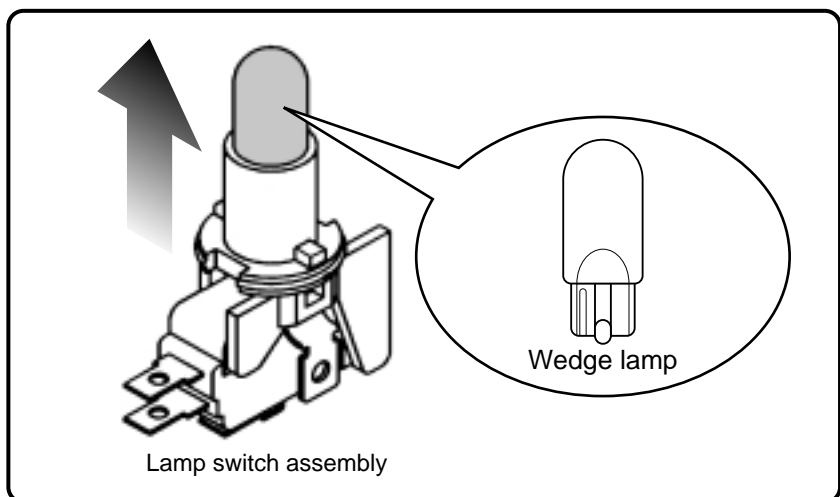
- 1** Turn OFF the power switch. Leave the machine OFF for at least three minutes to allow the lamp cool down. If you touch the lamp before it has cooled, you may be burned.
- 2** Unscrew the three screws and remove the wheel cover. You can find a switch section, where a lamp is integrated, on the rear side of the cover.



- 3** The switch section is secured using a switch support ring. Remove the screw that secures the ring using a hexagon wrench (diagonal size: 2.5 mm), and loosen the ring. Then, pull out the switch section.



- 4** Pull out the wedge lamp from the removed lamp switch assembly. Then replace the lamp.

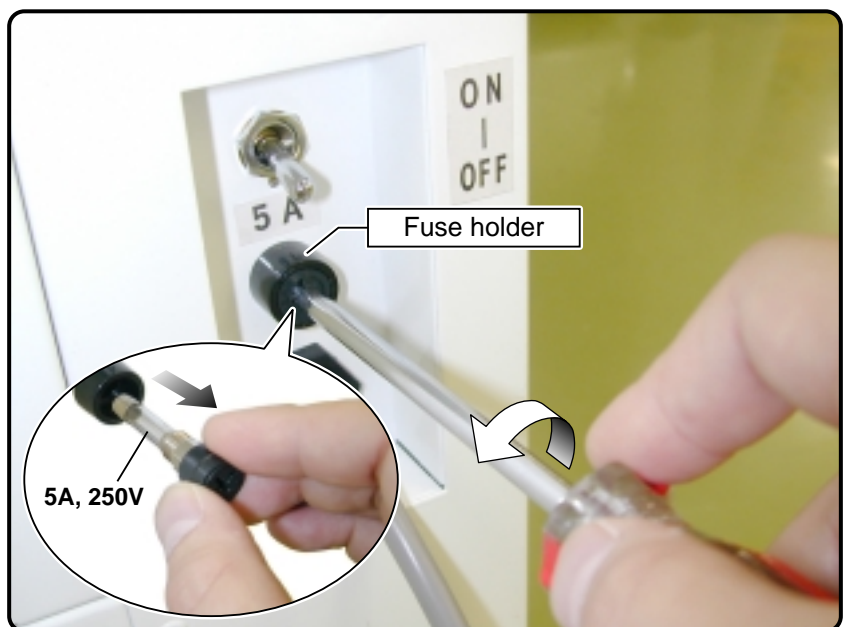


Replacing the lamps

Part name : Wedge lamp 0.25 A 12V
 Part number : C1400023A

Replacing the fuse

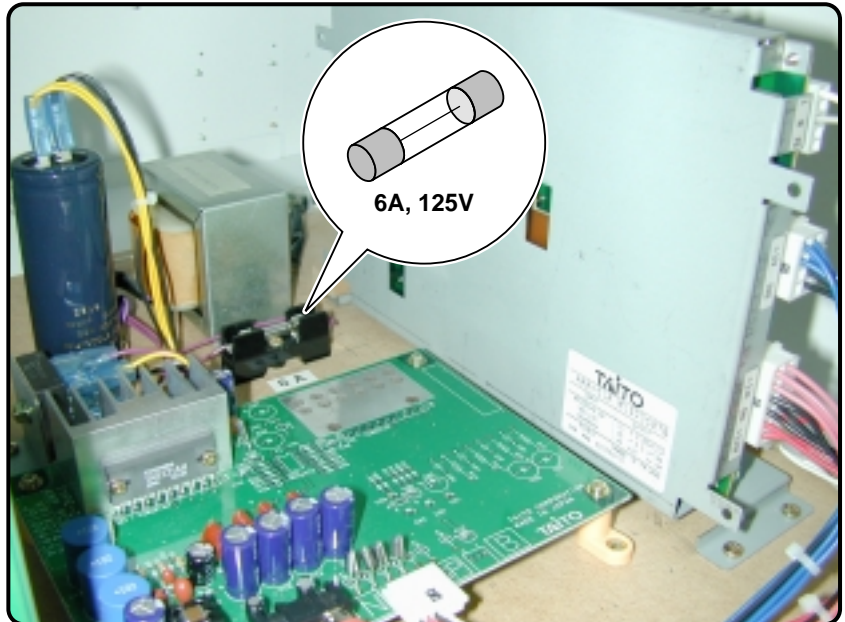
- 1** Turn OFF the power switch.
- 2** The main fuse is installed under the main power switch. Remove the fuse holder cap using a Phillips screwdriver. Then replace the fuse inside.



Fuse part No.

Part name : Fuse 5 A 250 V
Part number : C1600049A

- 3** The fuse for an amplifier PCB is installed in the cabinet. Open the rear door using the supplied service key, and replace the fuse that is designated in the figure.



Fuse part No.

Part name : Fuse 6 A 125 V

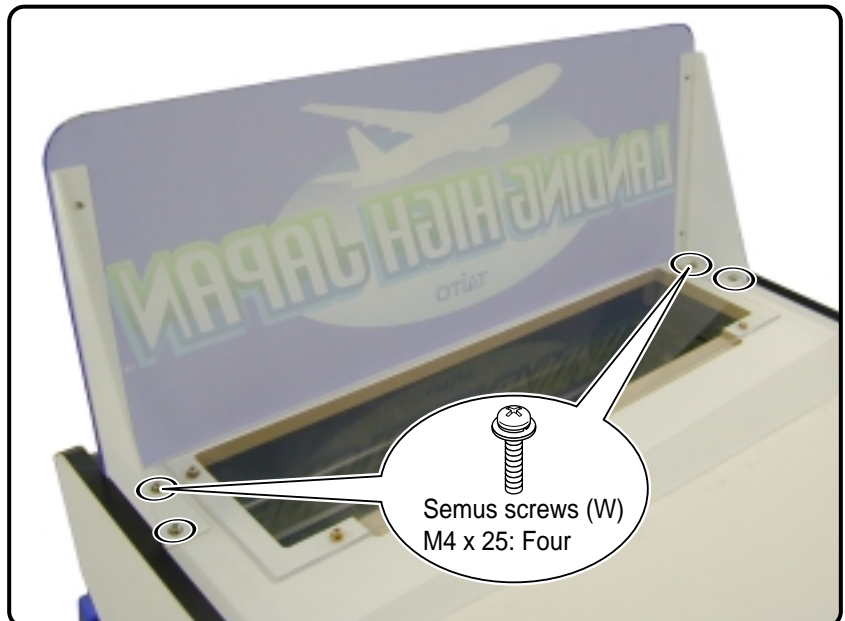
Part number : C1600038A

- 4** Never use fuses which do not have the specified capacities.

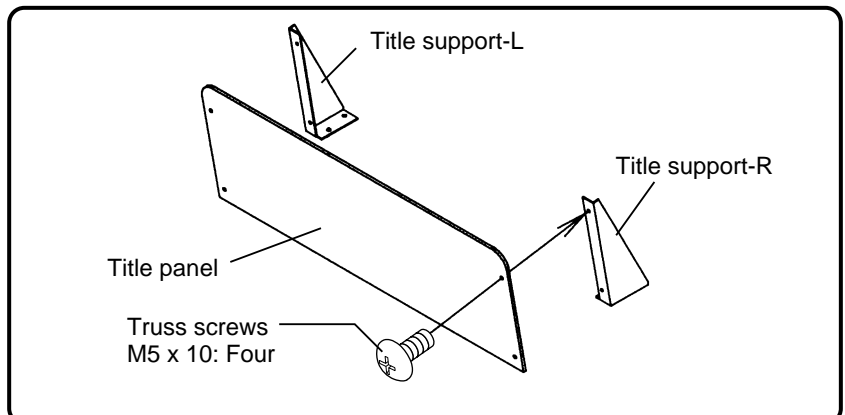
Removing the title panel

To remove the title panel, follow the procedures shown below. Before removing the panel, make sure to secure all of the foot adjusters, so that the main housing does not move during the work.

- 1** Turn OFF the power switch.
- 2** By removing the four screws shown in the figure, you can remove the title assembly. Be careful when removing it because you have to work at height.



- 3** To remove only the title panel (resin part), remove the four screws from the front, as shown in the figure.



Replacing the hard disk assembly

If an error is detected when the “HDD TEST” item is executed in the test mode, replace the hard disk assembly immediately. Be careful when handling the hard disk, since it is easily damaged.

Hard disk test

If the “CRC FALSE” message is displayed in the CHECK column while in the “HDD TEST” mode, you must replace the hard disk.

(“Hard disk test” section in Chapter 4 “Setting”: Page 65)

```

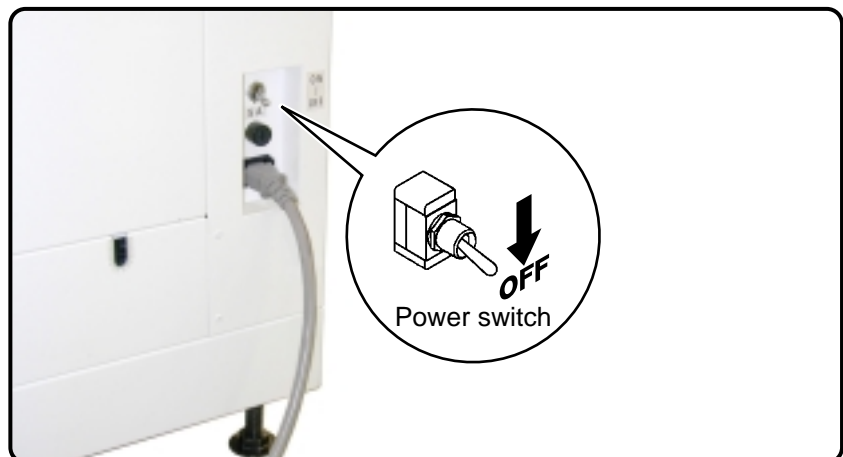
***** FILE CRC CHECK *****

< CHECK FILES >
NAME   : USER_MAIN
SIZE   : 000D2100
CRC    : *****
CHECK  : CRC FALSE

(PRESS START-SW RETURN TO MENU)

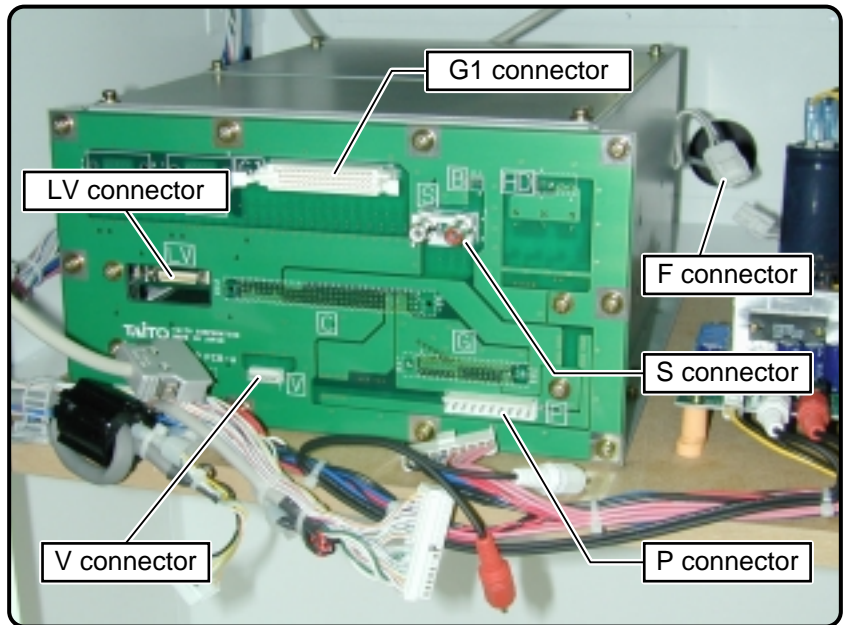
```

- 1 Turn OFF the power switch.

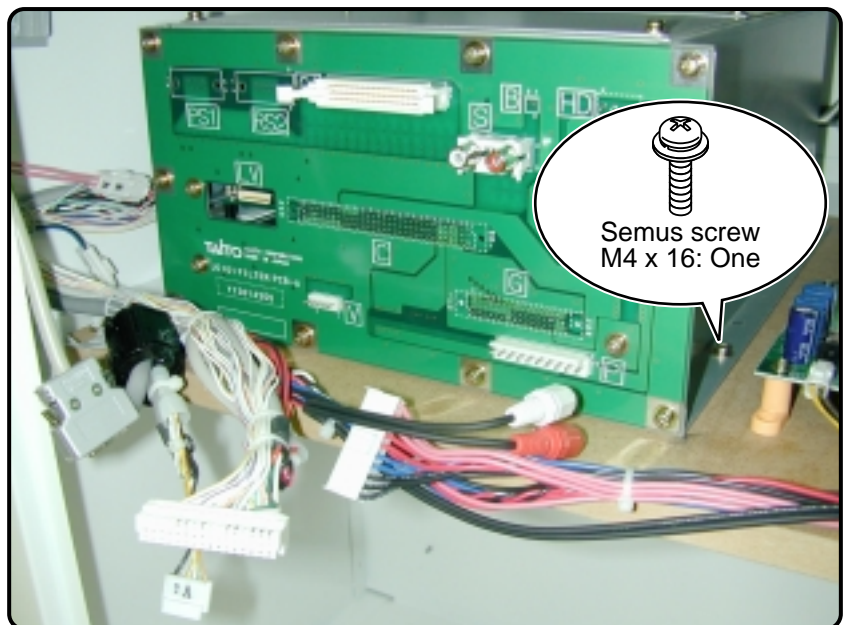


- 2 Open the rear door using the supplied service key.

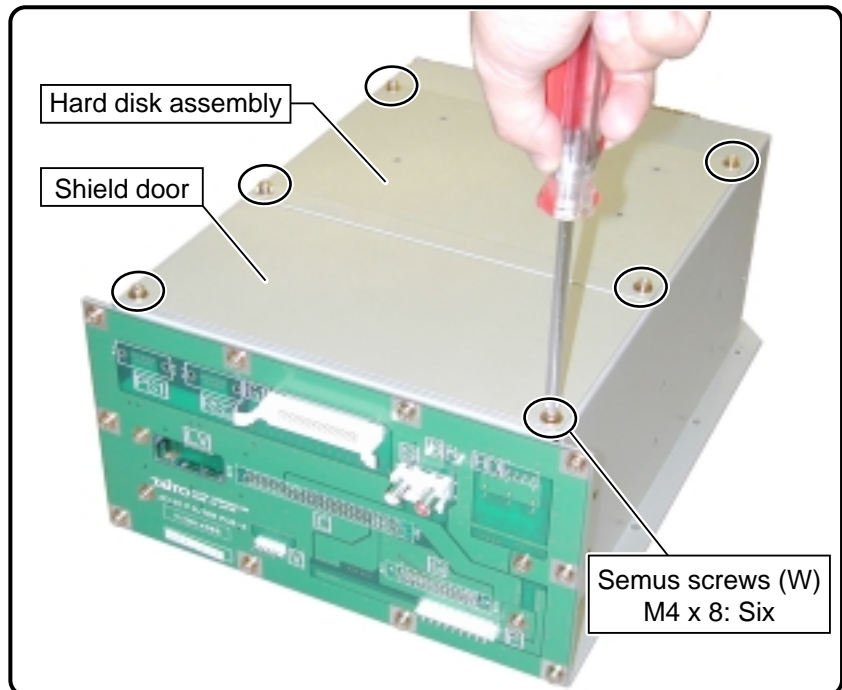
- 3** Remove all connectors on the shielded case.
(Connector G1, S, LV, V, P, and F)



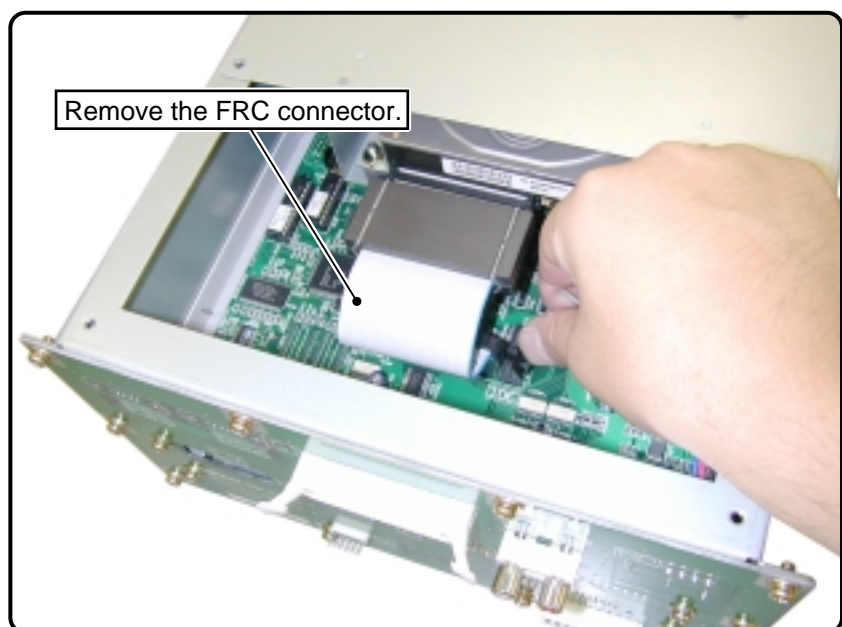
- 4** Remove the screw which secures the shielded case and pull the shielded case out.



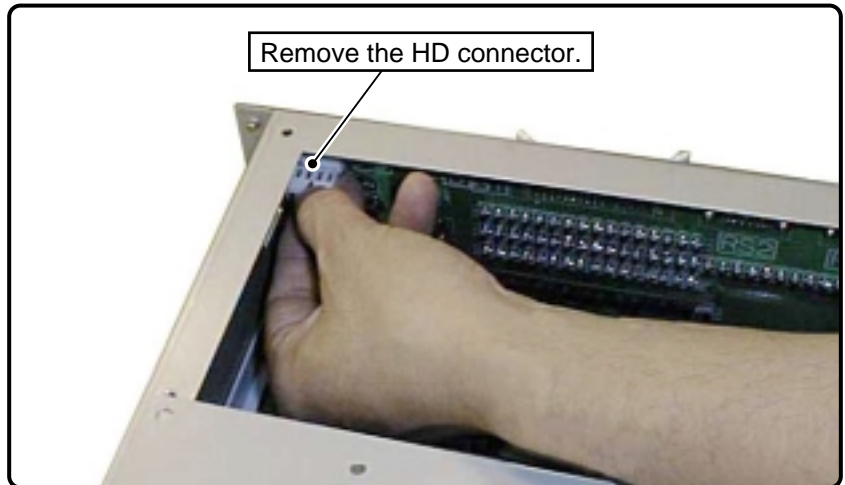
- 5 Remove the six screws from the cover protecting the hard disk assembly and on the shield door.



- 6 Remove the shield door and detach the FRC connector from the shielded case.



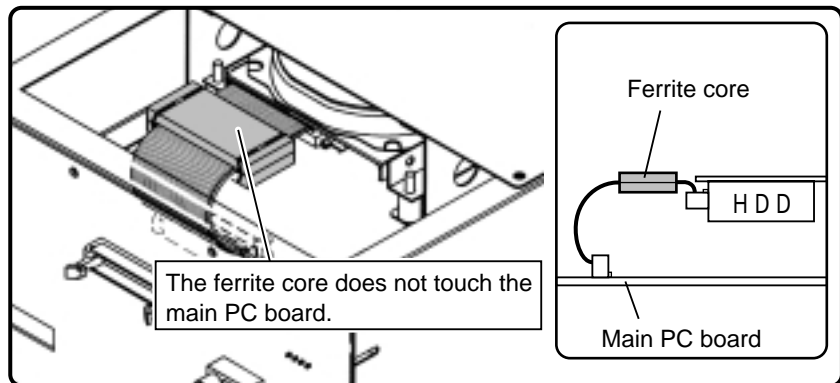
- 7 Remove the HD connector.



- 8 Lift and remove the faulty hard disk assembly.

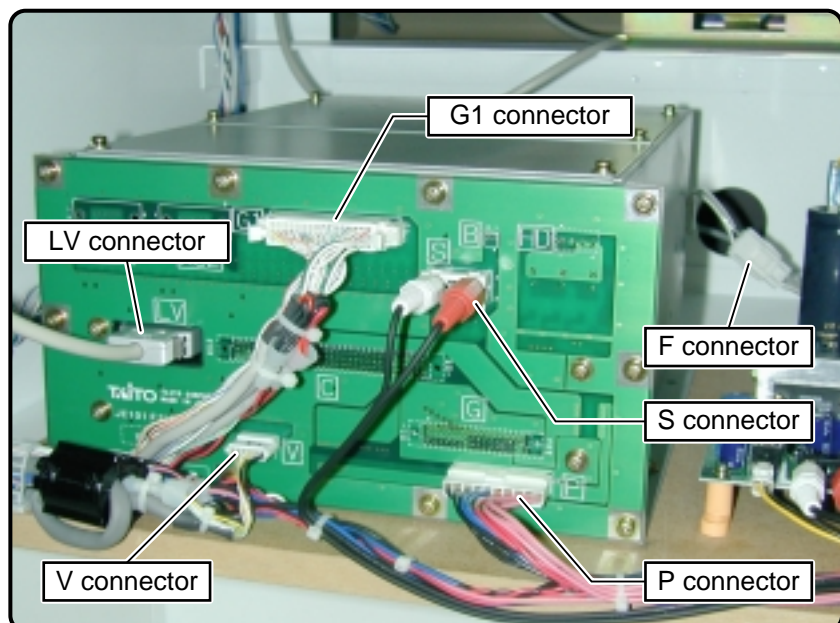


- 9** Replace the hard disk assembly and assemble the shield case by reversing the procedures. When connecting the FRC connector, set it on the upper side so that the ferrite core does not touch the main PC board.



- 10** Put the shielded case back into the main cabinet and secure it with the screw.

- 11** Connect each of the connectors to the shielded case.



- 12** Close the rear door and lock it using the service key.

- 13** Turn ON the power switch.

- 14 The “BACKUP DATA FAILED” message is displayed on the screen. Press the test switch.
- 15 The display will change to the “REINIT MODE” screen.



Lost backup data

Whenever the hard disk is replaced, all of the settings for game specifications, sound, and date and time will return to the factory settings. The adjustment data for the operation devices are also lost. You must specify these settings again.

- 16 Follow the instructions on the screen and specify the settings as described below.
 - ADJUSTMENT : Adjustment (page 69)
 - DATE SET : Date and time setting (page 79)
 - CONFIGURATION : Setting the game configuration (page 59)

- 17 Select the “EXIT” item using the view change button and press the start button.

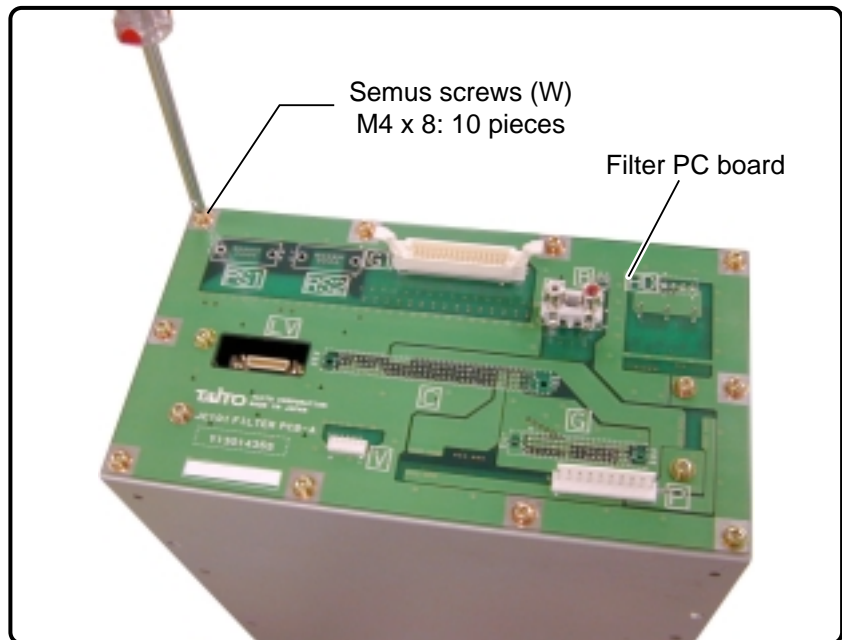
As you quit the setting mode, a confirmation screen will appear asking if you really want to restart the machine.

Removing the main PC board

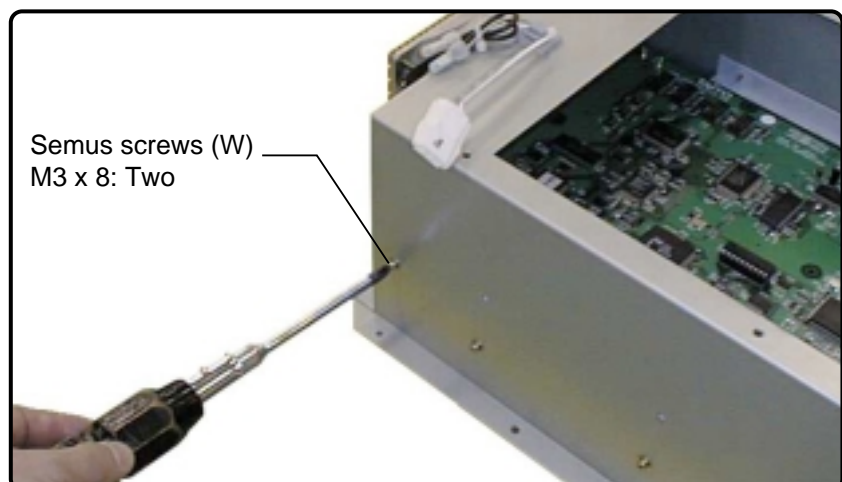
Before removing the main PC board, first make sure to remove the hard disk assembly. Refer to the procedure on pages 119 to 122, to remove the hard disk assembly.

1 Remove the hard disk assembly (see pages 119 to 122.)

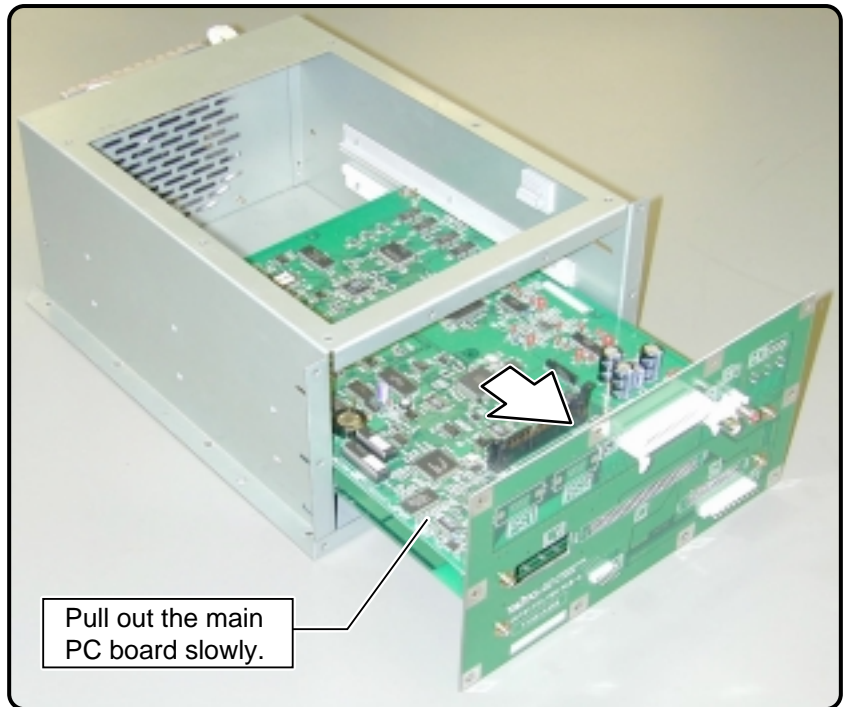
2 Remove the 10 screws from the filter PC board.



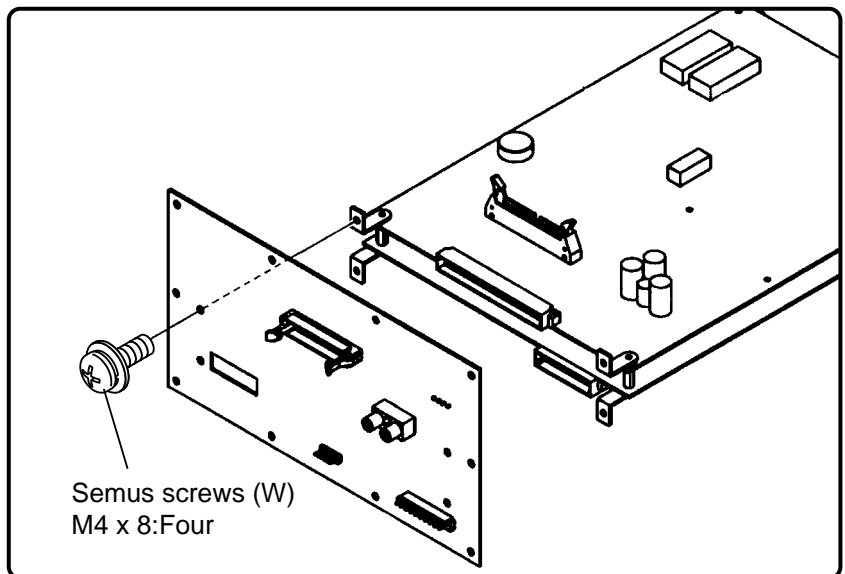
3 Remove the two screws on both sides of the shielded case.



- 4 Pull out the main PC board slowly.



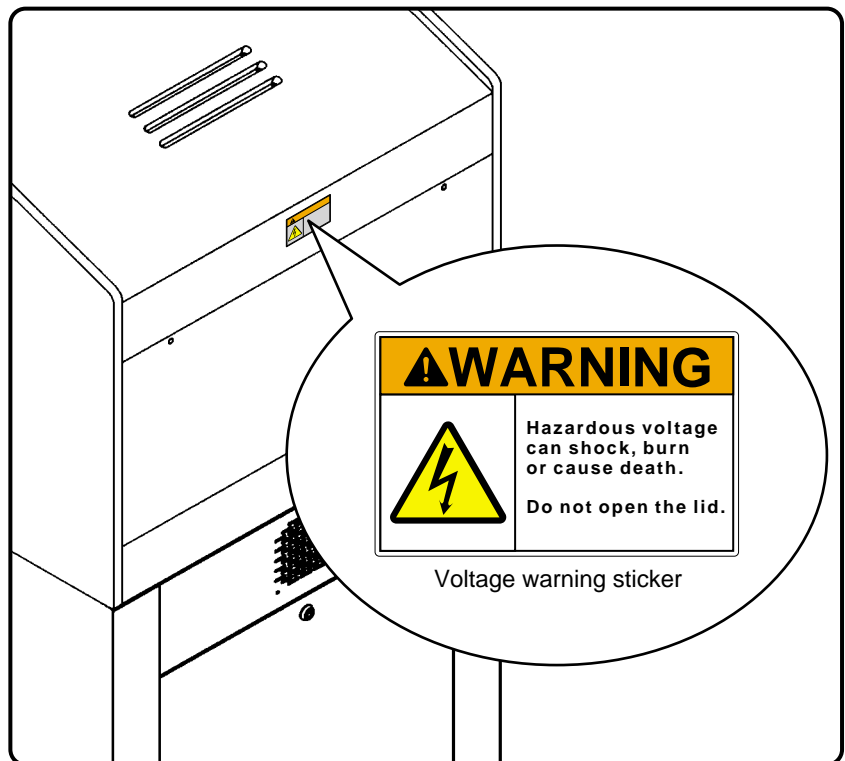
- 5 Remove the four screws securing the filter PC board and the main PC board.



Replacing the safety sticker on important parts

If the voltage warning sticker (an important part) becomes illegible due to dirt or wear, replace it with a new sticker.

- 1 Attach the new sticker on the rear center of the video box (see the figure below.)



Sticker part No.

Part name : Voltage warning sticker

Part number : G1501542A

Chapter 8 Machine discarding

8-1. Machine discarding

When discarding the “Landing high japan” game machine, or the parts used in the machine, the machine owners should handle all of the parts as industrial waste. Follow the instructions of the local authorities when discarding the packing materials used to protect the “Landing high japan” game machine from damage during transportation.

Chapter 9 Troubleshooting

9-1. Error message list

| Error message (screen display) | Contents/causes | Remedy |
|---|--|--|
| HDD ID CHECK ERROR HDD INITIAL ERROR | <ul style="list-style-type: none"> The data on the hard disk may be corrupted. | <ul style="list-style-type: none"> Check the error display, then contact our technical support center immediately. (Place to be contacted: Page 1) |
| SOUND LOAD ERROR APPLICATION LOAD ERROR | <ul style="list-style-type: none"> The data on the hard disk may be corrupted, or the main PC board may be damaged. | <ul style="list-style-type: none"> Replace the hard disk. (Replacing the hard disk assembly: Page 119) |
| SOUND LOAD TIME OUT ERROR BACKUP RAM ERROR | <ul style="list-style-type: none"> The main PC board may be damaged. | <ul style="list-style-type: none"> Remove the main PC board. (Removing the main PC board: Page 125) |
| COIN ERROR | <ul style="list-style-type: none"> The coin switch is malfunctioning. Coins may be jammed in the coin insert slot. | <ul style="list-style-type: none"> Check the coin switch while in the test mode. If no switch input is detected, replace the switch. (Checking input items: Page 55) Open the coin rejection door and check the rejecter. (After an error occurs, the machine will reset automatically.) |
| SERVICE SW ERROR | <ul style="list-style-type: none"> The service switch is malfunctioning. The service switch may be being held down. | <ul style="list-style-type: none"> Check the service switch while in the test mode. If no switch input is detected, replace the switch. (Checking input items: Page 55) Check the service switch condition. |
| BACKUP DATA FAILD | <ul style="list-style-type: none"> The backup RAM data is lost. The hard disk may have just been replaced. | <ul style="list-style-type: none"> Press the test switch. Then, follow the screen instructions to reset the settings. (Replacing the hard disk assembly: Page 119) |
| RANKING DATA LOST | <ul style="list-style-type: none"> The ranking data is lost. The power may not have been turned ON for three days or more. | <ul style="list-style-type: none"> Press the test switch. Then, follow the screen instructions to reset the settings. (Lost ranking data: Page 108) |

If any other error message is seen

If any other error message is seen or if a problem not covered above occurs, please contact your dealer.

9-2. Troubleshooting

| Problem | Possible cause | Remedy |
|---|--|--|
| The machine does not start after the power switch is turned ON. | <ul style="list-style-type: none"> · The power cord plug is not plugged into the outlet. · The +5 V or +3.3 V voltage from the power supplies are not adjusted properly. | <ul style="list-style-type: none"> · Check the power cord plug, then turn ON the power again. · Adjust the switching regulators. (How to adjust the +5 VDC supply: Page 94) (How to adjust the +3.3 VDC supply: Page 95) |
| The sound cannot be heard. (or the sound is too loud.) | <ul style="list-style-type: none"> · The sound level is not adjusted properly. | <ul style="list-style-type: none"> · Change the volume setting in the test mode. (Sound test: Page 66) |
| The control column does not match the screen display. | <ul style="list-style-type: none"> · The machine operating devices are not adjusted properly. | <ul style="list-style-type: none"> · Select the "ADJUSTMENT" item in the test mode and adjust the settings again. (Adjustment: Page 72) |
| <p>Some area on the monitor has strange colors.</p> <p>The display on the monitor is out of position or is distorted.</p> | <ul style="list-style-type: none"> · The monitor may be magnetized. · The monitor may not be adjusted properly. | <ul style="list-style-type: none"> · Press the degaussing switch on the central control section inside the coin rejection door. (Eliminating color inconsistencies on the monitor screen: Page 90) · Adjust the monitor again using the adjustment panel in the coin rejection door. (Adjustment of the monitor screen: Page 87) |
| <p>The title display is too dark.</p> <p>The switch lamp does not light. (start and view change)</p> | <ul style="list-style-type: none"> · The fluorescent lamp may have burned out. · The switch may be broken. | <ul style="list-style-type: none"> · Replace the fluorescent lamp or glow lamp. (Replacing the fluorescent lamp: page 110) · Replace the switch lamp. (Replacing the lamp on the control box: Page 112) · Replace the switch lamp. (Replacing the lamp in the speak button: Page 114) |
| An error message appears. | | <ul style="list-style-type: none"> · Refer to the error message list on the previous page. (Error message list: Page 129) |